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# RECONNAISSANCE AND DETAILED QPX B-HORIZON SOIL AND QPVX VEGETATION GEOCHEMISTRY IN THE BATHURST MINING CAMP, GLOUCESTER AND NORTHUMBERLAND COUNTIES, NEW BRUNSWICK

H. Lahti, S.R. McCutcheon, and M.A. Parkhill

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## Plates (in pocket)

Lahti, H., McCutcheon, S.R. and Parkhill, M.A. 2003. Bedrock geology and location of QPX B-horizon soil samples, southeastern Bathurst Mining Camp, Gloucester and Northumberland counties, New Brunswick. New Brunswick Department of Natural Resources and Energy, Minerals, Policy and Planning Division, Plate 2003-7A.

Lahti, H., McCutcheon, S.R. and Parkhill, M.A. 2003. Multi-element QPX B-horizon soil geochemical and geophysical profiles of Transects 5000 and 6000, Bathurst Mining Camp, Gloucester and Northumberland counties, New Brunswick. New Brunswick Department of Natural Resources, Minerals, Policy and Planning Division, Plate 2003-7B

## Diskette (in pocket)

3.5 inch diskette containing the following files:

Readme2003-8.doc
Appendix1-QPX5000.xls
Appendix2-QPX6000.xls
Appendix3a-QPXRailroad.xls
Appendix4a-QPXFronsac.xls
Appendix5a-QPXCamelBack.xls
Appendix6a-QPVXTaylorBrook.xls
Appendix7a-CONRail1&2.xls
Appendix7b-CONFronsac.xls
Appendix7c-CONCamelBack.xls
Appendix8a-CONvsQPXRail.xls
Appendix8b8c-CONvsQPXFronsacCamelBack.xls
Appendix9-QPXQualityControl.xls
Appendix10-QPXUTM.xls
Appendix3b4b5b6b7b8d8e8f-QPXCONGraphs.xls

## Abstract

In 2001 a total of 220 B-horizon soil samples were collected using a hand auger, at 100 meter spacing along 2 Transects (5000 and 6000) in the southeastern part of the Bathurst Mining Camp. The transects are located east of the Heath Steele Mine, one just north of and the other just south of the CNE deposit, and cross the regional geology in a west-northwesterly direction. Quantum particle extraction (QPX) combined with ICP-MS geochemical analysis was applied to these samples because it can enhance the ability to detect deeply buried base-metal targets (up to 200 m).

Two anomalous zones along Transect 6000 were chosen for detailed soil sampling surveys in 2002. Detailed soil sampling surveys were also done at the Mount Fronsac and Camel Back massive sulphide deposits. A total of 250 B-horizon soil samples were collected and analyzed by ICP-MS using the QPX process as well as conventional extraction techniques. A bark sampling survey was also completed over Carboniferous sedimentary rocks along the Taylor Brook Road.

A comparison of QPX and conventional results shows that the conventional concentrations are consistently lower than the QPX concentrations. In most instances the conventional analyses gave weaker anomalies than the coincident QPX enrichment zones. The value of conventional geochemical methods should not be discounted. The results of the bark survey indicate one good vegetation anomaly along the traverse at sample site 7195.

## Résumé

On a prélevé en 2001 un nombre total de 220 échantillons de sol de l'horizon B au moyen d'une tarière à main suivant un espacement de 100 mètres le long de deux transects (5 000 et 6 000) dans le sud-est du Camp minier de Bathurst. Les transects en question sont situés à l'est de la mine Heath Steele, l'un juste au nord et l'autre juste au sud du gîte CNE, et ils traversent l'assiette géologique régionale dans une direction ouest-nord-ouest. Ces échantillons ont été soumis à une extraction des particules quantiques (QPX) conjuguée à une analyse géochimique au spectromètre de masse à plasma inductif, parce que celle-ci peut améliorer la capacité de détecter des cibles de métaux communs profondément enfouies (jusqu'à 200 mètres).

Deux zones anomales à l'intérieur du transect 6000 ont été retenues aux fins de relevés d'échantillonnage de sol détaillées en 2002. Des relevés détaillés d'échantillonnage de sol ont également été réalisés dans les gîtes de sulfures massifs du mont Fronsac et de Camel Back. On a recueilli au total 250 échantillons de sol de l'horizon B, qui ont été analysés au spectromètre de masse à plasma inductif, au moyen du procédé QPX ainsi que de techniques d'extraction conventionnelles. On a également effectué un relevé d'échantillonnage d'écorces au-dessus de roches sédimentaires du Carbonifère le long du chemin Taylor Brook.

Une comparaison des résultats obtenus au moyen du procédé QPX et des techniques conventionnelles révèle que les concentrations tirées des procédés conventionnels sont constamment inférieures aux concentrations QPX. Dans la majorité des cas, les analyses à l'aide des techniques conventionnelles fournissent des anomalies plus faibles que les zones d'enrichissement QPX coïncidentes. Il ne faudrait pas négliger la valeur des méthodes géochimiques conventionnelles. Les résultats du relevé d'écorces signalent une anomalie de végétation prononcée le long de la traverse au point d'échantillonnage 7195.

# RECONNAISSANCE AND DETAILED QPX B-HORIZON SOIL AND QPVX VEGETATION GEOCHEMISTRY IN THE BATHURST MINING CAMP,

## GLOUCESTER AND NORTHUMBERLAND COUNTIES, NEW BRUNSWICK

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LAHTI, H., MCCUTCHEON, S.R. and PARKHILL, M.A. 2003. Reconnaissance and detailed QPX B-horizon soil and QPVX vegetation geochemistry in the Bathurst Mining Camp, Gloucester and Northumberland counties, New Brunswick. New Brunswick Department of Natural Resources, Minerals, Policy and Planning Division. Open File 2003-8, 112p.

## 1.0 Introduction

### 1.1 Background

Great advances have been made in exploration geochemistry in the last decade by Russian, Chinese, Australian and Canadian geochemists (Hall 1996). New sampling techniques, combined with advances in new instrumentation such as ICP-ES, ICP-MS, XRF and INAA, have made it possible to explore for gold and base metals buried under barren rock and transported overburden. Now sophisticated partial extractions, such as Enzyme Leach and the Australian developed Mobile Metal Ions (MMI), combined with novel sample collection methods are targeting mobile metal ions.

Early in the 1970's, the USSR developed the CHIM (Leinz and Hoover 1993) and NEOCHIM geochemical methods that could detect anomalies in till and pediments directly over hidden mineral deposits. At about the same time, Barringer Research in Toronto embarked on a R&D project (financed by Anglo American) to see if a method of surface soil sampling and analysis could be developed to detect apical anomalies over hidden mineral deposits. The result was the Surface Microlayer (SML) sampler, which the author (Lahti) tested in arid to desert conditions, where it worked very well. The SML tests were designed to follow-up Barringer's AIRCHEM System that was being developed at the same time. It was intended to capture airborne particulate material carrying the geochemical signal from a buried deposit. The whole project was only partially successful because of the low sensitivity of the ICP-ES analytical instrument used at the time and the effects of weather on the AIRCHEM system. The program was cancelled in the early 1980's.

In 1994, a new company was formed in Golden, Colorado by Dr A. Barringer called Barringer GeoSystems Inc. A clean room (certified to have less than 1000 particles per cubic meter of air) with an ICP-MS was built. Over $13 million of R&D funds were provided by Kennecott Mining and Exploration USA. This ICP-MS instrument was about 1000 times more sensitive than the earlier ICP-ES and had a very large dynamic range (Hall 1996). The SML sampling equipment was quickly rebuilt and a new SMX (Surface Microlayer Extraction) technology was developed to sample natural occurring nanosize particles (quantum dots) known to occur (Wang et al. 1997) in the surface microlayer (SML). It was successfully tested at a cost of about $1.5 million over 6 gold deposits in Nevada. At this time Kennecott was bought out by RTZ/CRA the worlds largest mining and exploration company. The SMX technology was accepted and signed off (confidential report) by RTZ/CRA Kennecott in December, 1996. The SMX geochemical technology was put to immediate use for exploration over Kennecott properties in Mexico. However, RTZ/CRA shortly afterwards purchased Kennecott USA, shut it down and stopped all funding to Barringer GeoSystems Inc. In 1999, the SMX equipment was purchased by Howard Lahti and brought to Fredericton, New Brunswick where a facility was set up, minus the ICP-MS. Deep Search Exploration Technologies Inc (DSET Inc.) was incorporated in September, 2000.

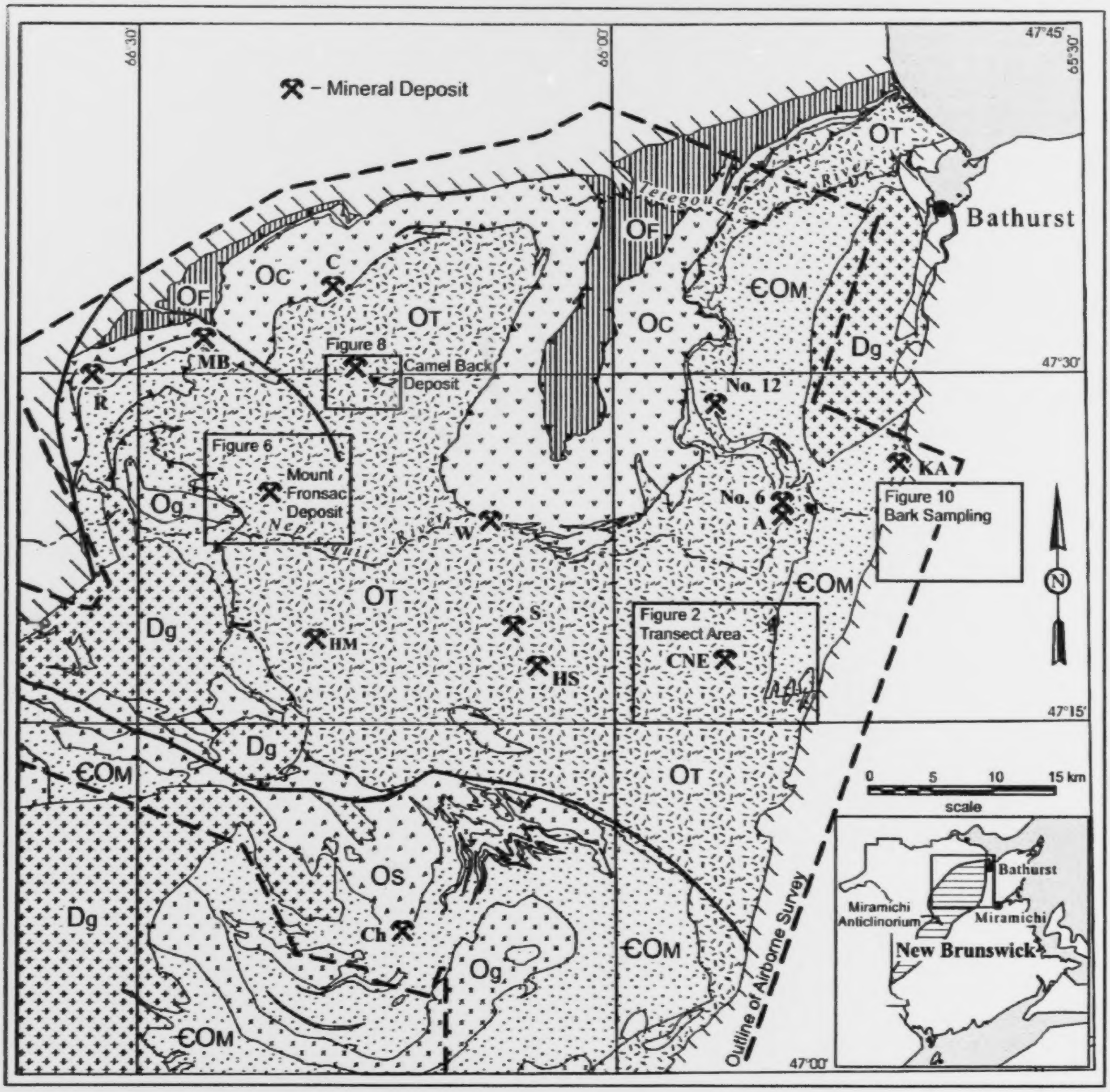
There is no Surface Microlayer to be found in New Brunswick. The SMX methodology had to be modified so that B-horizon soil could be used. It is rich in iron and manganese sesqui-oxides, material that is known to concentrate the nanosize particles of ore bearing material. Freewest Resources Canada and DSET Inc. financed the initial tests of the Quantum Particle Extraction (QPX) process. These initial tests produced encouraging results, so the New Brunswick Department of Natural Resources and Energy, through the Value Added Processing Program (VAMP), provided additional funds to do further QPX tests. As a result, vegetation bark sampling (QPVX) was evaluated as a geochemical exploration tool for areas where soils are poorly developed or nonexistent, i.e. primarily over swamps (Lahti 2001). By the end of 2000 both techniques were developed to the point were they could be used as routine exploration tools. Further funding from DNR in the years 2001-2002, was for field trials of the techniques in the Bathurst Mining Camp (BMC) where many volcanogenic massive sulphide (VMS) deposits exist. These government funded soil and vegetation survey results are described in this report.

### 1.2 Objectives

The eventual closure of Noranda's Brunswick # 12 mine will have a profound and detrimental effect on the local employment and adversely affect the government's tax income. The number of prospectors and exploration companies looking for base metals has fallen to historical lows. In 2002 Noranda shut down its New Brunswick exploration office leaving the impression that there is no further exploration potential in the BMC (Figure 1). However, the BMC is like an iceberg in that 90% of it is below the surface. Until recently, no exploration technology existed to effectively explore the subsurface below 100 m. Considering that the Brunswick No. 12 mine extends to a depth of over 1000 m, there is considerable room for new deposits to be found. In order to address this diminished exploration activity the New Brunswick Department of Natural Resources and Energy expanded the training of prospectors, offered grants, incentives and tax breaks to encourage individuals and especially Junior Exploration companies to search for base metals and other elements such as gold. Concurrently, the government is encouraging and promoting the testing of deep exploration techniques. In 2001 and 2002, DNR designed and conducted projects to evaluate two transects that cut across favourable stratigraphy in the southeastern part of the BMC. Transects 5000 and 6000 were selected as reconnaissance soil sampling tests. These 11 kilometer long traverses were sampled at 100 m intervals. In 2002, detailed (20 m to 50 m sample spacing) sampling was carried out in four areas (Figure 1) as follow up to the initial survey.

**The objectives in 2001 were as follows:**

a) Test the QPX geochemical method by sampling along two 11 km long transects (5000 and 6000) in the southeastern BMC to see if the surveys would detect previously unknown geochemical targets (Figure 2). b) Examine the potential of using the new geochemical technology as a reconnaissance exploration tool. c) If good QPX anomalies could be identified, plan for a limited follow-up program of detailed sampling for the 2002 field season.


⚒ - Mineral Deposit
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66°00'
65°30'
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47°30'
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47°00'
Bathurst
Tetegouche River
Nepisiguit River
OT
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OC
ꞒOM
Dg
Og
Os
C
MB
R
Figure 8
Camel Back Deposit
Figure 6
Mount Fronsac Deposit
No. 12
No. 6
A
KA
W
Figure 10
Bark Sampling
S
HM
HS
Figure 2
Transect Area
CNE
Ch
Outline of Airborne Survey
0
5
10
15 km
scale
N
Bathurst
Miramichi Anticlinorium
Miramichi
New Brunswick

Figure 1. Simplified geology of the Bathurst Mining Camp (BMC) showing the locations of the study areas and selected mineral deposits. Rock units as follows: ꞒOM – Miramichi Group; OC – California Lake Group; OF – Fournier Group; OS – Sheephouse Brook Group; OT – Tetagouche Group; Og – Ordovician granitoid rocks; Dg – Devonian granitoid rocks.

**The objectives for DNR in 2002 were as follows:**

a) Follow-up two areas (adjacent to sample sites 6032 and 6040) along Transect 6000 with a multi-line detailed QPX soil survey. In this report they are referred to as Railroad 1 (Figures 3 and 4) and Railroad 2 anomalies (Figure 5). b) To test two other areas located near known VMS deposits using the QPX technology. One is near the Mount Fronsac massive sulphide deposit (Figures 6 and 7), where three magnetic anomalies were evaluated by soil sampling along single cut lines. The other area is near the Camel Back massive sulphide deposit where three lines were sampled over a drill hole that intersected 44 feet of iron formation (Figures 8 and 9). c) To carry out vegetation (bark) sampling along a single line over the Carboniferous sedimentary rocks south of the Key Anacon massive sulphide deposit. The Carboniferous sedimentary rocks are known to be covering Ordovician volcanic rocks that are prospective for VMS deposits (Figures 10 and 11). d) To compare conventional and QPX geochemical methods using the same samples.

## 2.0 Physiography

The BMC straddles three physiographic subdivisions of the Appalachian Region of Canada: the Northern Miramichi Highlands, the Eastern Miramichi Highlands and the New Brunswick Lowlands. The present landscape of the study area, except for minor changes during the Quaternary Period, reflects erosion in Carboniferous-Tertiary times (Rampton et al. 1984). Drainage in the BMC is radially off of the Miramichi Highlands.

The western and central parts of the BMC are within the Northern Miramichi Highlands, a rugged terrain underlain by Lower Palaeozoic sedimentary and igneous rocks. Topography is strongly bedrock controlled. High mountains and ridges are generally angular and peaked where underlain by resistant volcanic rocks and are rounded and flat topped where they are underlain by intrusive (mainly granitic) rocks. Topographic lineaments are especially evident along major faults and bedrock contacts. Elevation commonly is between 450 m and 600 m asl. Wide U-shaped valleys were formed or modified by glacial erosion and acted as glacial meltwater channels. Many present day major watercourses partly follow faults and/or bedrock contacts.

Much of the eastern part of the BMC lies within the Eastern Miramichi Highlands, a gently rolling and hummocky terrain, underlain by Cambrian–Ordovician volcanic and sedimentary rocks. The Highlands are transitional between the rugged mountainous area to the west (Northern Miramichi Highlands) and the flat swampy plain to the east underlain by Carboniferous sedimentary rocks (New Brunswick Lowlands). Elevation is generally below 450 m asl with local relief commonly 60-120 m asl (Rampton et al. 1984). Watercourses exhibit both U-shaped valleys (glacial origin) and incised V-shaped valleys (fluvial origin). The extreme eastern part of the BMC straddles the Eastern Miramichi Highlands and New Brunswick Lowlands physiographic divisions of Rampton et al. (1984). The north-northeast trending Curventon-Bathurst Valley is a low-lying, poorly drained area with many swamps and glacially streamlined and fluted bedrock terrain situated between these two divisions.

## 3.0 Bedrock Geology

The BMC is part of the Miramichi Anticlinorium of north central New Brunswick (Figure 1). It is underlain by polydeformed rocks of the Cambrian-Ordovician Miramichi Group and the Ordovician Tetagouche, California Lake, Sheephouse Brook and Fournier groups (van Staal et al., in press; van Staal and Rogers 2000). To the east, the BMC is unconformably overlain by Carboniferous sedimentary rocks of the Bathurst and Clifton formations (Langton 1993; van Staal and Rogers 2000). To the north and west, the BMC is in fault and unconformable contact with sedimentary and igneous rocks of the Silurian Chaleurs Group and Devonian Tobique Group (Gower 1995; van Staal and Rogers 2000).

In the study area the Miramichi Group, consisting of the Patrick Brook Formation (unit OPBs), is composed mainly of shale, quartzite, quartz wacke and volcaniclastic wacke. The Tetagouche Group that conformably to disconformably overlies the Miramichi Group comprises a lower felsic and upper mafic volcanic pile intercalated with siltstone, chert, shale and feldspathic sandstone within the (in descending age) Nepisiguit Falls Formation (units ONFs, ONFt and ONFif), Flat Landing Brook Formation (units OFLif and OFLfv), Little River Formation (units OLRBM and OLRs) and Tomogonops Formation (unit OTMs) (van Staal and Rogers 2000; van Staal et al., in press). For more detailed descriptions of the rock units see Plate 2003-7A. The rocks of the BMC are generally metamorphosed to greenschist facies and are affected by five phases of deformation (van Staal et al., in press). Ordovician and Devonian felsic and mafic plutons intrude the rocks of the BMC and underlie much of the area immediately southwest of the BMC (Whalen 1993).

A total of 45 known Zn-Pb-Cu massive sulfide deposits (e.g. Brunswick No. 12, Brunswick No.6, Caribou, Heath Steele, Restigouche, Murray Brook, Key Anacon and Captain North Extension) and approximately 96 smaller mineral occurrences, occur in the BMC (Rose and Johnson 1990; Goodfellow and McCutcheon, in press). The main sulfide mineral assemblages in the deposits are pyrite + sphalerite + galena + pyrrhotite + chalcopyrite. Most of the deposits occur within chloritic mudrocks and dark grey shales within the volcano-sedimentary pile of the Tetagouche (31) and California Lake (13) groups respectively, with the Chester deposit occurring in felsic volcanic rocks of the Sheephouse Brook Group (Goodfellow and McCutcheon, in press). Deposit-types include proximal and distal stratiform (sediment-hosted) massive sulfide deposits. Many deposits in the Tetagouche Group have an associated oxide iron formation.

## 4.0 QPX Technology

### 4.1 QPX Theory

Several papers have been published in Scientific American (September 2001 and December 1989) (Duncan and Rouvry 1989), which verify the existence of nanosize particles that have unusual geochemical properties. Other tests (Nature 1983) show that naturally occurring "quantum dots" (with gas like properties), can be produced by radioactive material found in all rock formations. They migrate upwards through barren rock and till like helium, radon, carbon dioxide and argon, during the natural degassing of the earth. SMX, the precursor of QPX, was developed at the Barringer GeoSystems Inc. laboratory in Denver and focused on utilizing the special physical and chemical properties of quantum dots.

Both the Enzyme Leach (EL) and Mobile Metal Ions (MMI) methods use specific aqueous solutions and ligands to extract metal ions found in the "B" and "A" soil horizons, respectively but the QPX method uses an extraction technique based on physics to obtain a Quantum Dot concentration of ore metals found in B-horizon soil. As a result, QPX anomalies are generally not displaced but are found directly above blind mineral deposits. Furthermore, hydromorphic anomalies are rarely found, even over transported till, unlike EL and MMI anomalies. Most geochemical anomalies are explained based upon an electro-chemical cell model (Smee 1979, 1998; Hamilton 1998) but QPX anomalies are formed by the accumulation of nanosize particles (quantum constrained) in the B-horizon. These particles move through barren rock and till with properties similar to that of a gas and therefore, follow pressure and temperature gradients. They do not require an electro-chemical cell model to explain the movement of mobile ore elements. Another significant difference between the QPX method and other methods is in the digestion stage. Some methods use weak digestions or weak aqueous solutions that can have problems with re-absorption back into the sample (Gray et al. 1998), but the QPX method uses a hot

Aqua Regia digestion that does not allow this common problem to occur. The actual SMX/QPX method is proprietary (patent pending) and solely owned by DSET Inc./Barringer GeoSystems Inc.

### 4.2 QPX Soils Methodology and Analytical Methods

A regular soil-sampling auger was used to collect about 500-1000 g of material from the B-horizon soil. The sample was placed in a zip-lock plastic bag and sealed firmly with tape. In the Fredericton DSET Inc. laboratory the samples were emptied onto clean steel or plastic trays and dried at the ambient temperature. Once dry they were sieved through a –80 mesh screen. The minus 80-mesh portion was placed in a separate zip-lock bag for later use. To get a good representative sample, 3-5 g of a homogenized –80 mesh material was used to obtain a soil concentrate enriched in Quantum Dot material. The amount of soil used in the QPX process depended on the quality of the B-horizon soil. All of the samples were analyzed by Acme Laboratories Ltd. located in Vancouver, BC. An ICP-MS was used for the QPX method and an ICP-ES for the conventional soil analyses.

To compare QPX geochemical results with conventional geochemical results a small split of the –80 mesh fraction of the samples collected in 2002 were sent to Acme Laboratories Ltd., Vancouver, BC (same samples used for the QPX method). A 0.5 g sub-sample was weighed out and digested in hot Aqua Regia for 30 minutes then analyzed by an ICP-ES, the normal instrument used for conventional analysis. About 192 samples from the Railroad 1 and 2, Mount Fronsac and Camel Back areas were analyzed by this method. The results for both QPX and conventional analytical methods are printed in tables to make a direct comparison possible. The data and selected figures are located in Appendix 8.

### 4.3 Previous QPX Tests in the Bathurst Mining Camp

#### 4.3.1 General

Prior to this study, two orientation tests (case studies) were conducted for companies in the BMC. One was carried out in 2000 over the Key Anacon East massive sulphide (VMS) deposit and the other was done in 2001 over the Halfmile Lake massive sulphide deposit (Figure 1).

#### 4.3.2 Irving Key Anacon East VMS Deposit

The first case study was done over the 1 million plus ton Key Anacon East VMS deposit. This test was proposed by Noranda because the deposit is covered by up to 3 m of till, 1-2 m of Carboniferous shales and over 200 m of barren host rock. Conventional geochemical analysis was also done. Permission to do this test was obtained from the property owner, Hunter Brook Holdings Inc., through Dr. A. McAllister.

The results showed that the QPX values for Cu, Pb, Zn and Ag give a very strong apical anomaly over the VMS deposit. Other elements such Hg, As, Ba and Au (unpublished data) also give a strong response over the deeply buried sulphide body. The conventional results show a very poor response (low background to anomaly contrast) with only a slight enrichment for Zn. The conventional geochemical concentration levels are so low that no explorationist would consider them significant (unpublished data 2000).

### 4.3.3 Noranda Halfmile Lake VMS Deposit

A comprehensive soil QPX survey was done over the Halfmile Lake VMS deposits for Noranda Inc. Unlike Key Anacon, very little of the area is covered by thick glacial till but most of the area is covered by a thin poorly developed silt-sand soil veneer over rhyolite. The three deposits are buried at various depths. One sulphide deposit sub-outcrops but was not crossed by any of the test lines, another one lies buried under 500-1000 feet of barren rhyolite and the largest deposit is buried under 3000-4000 feet of barren rhyolite. Conventional soil geochemistry was not done because in previous soil surveys (G. Woods, pers. comm.) the deeply buried sulphide bodies were not detected.

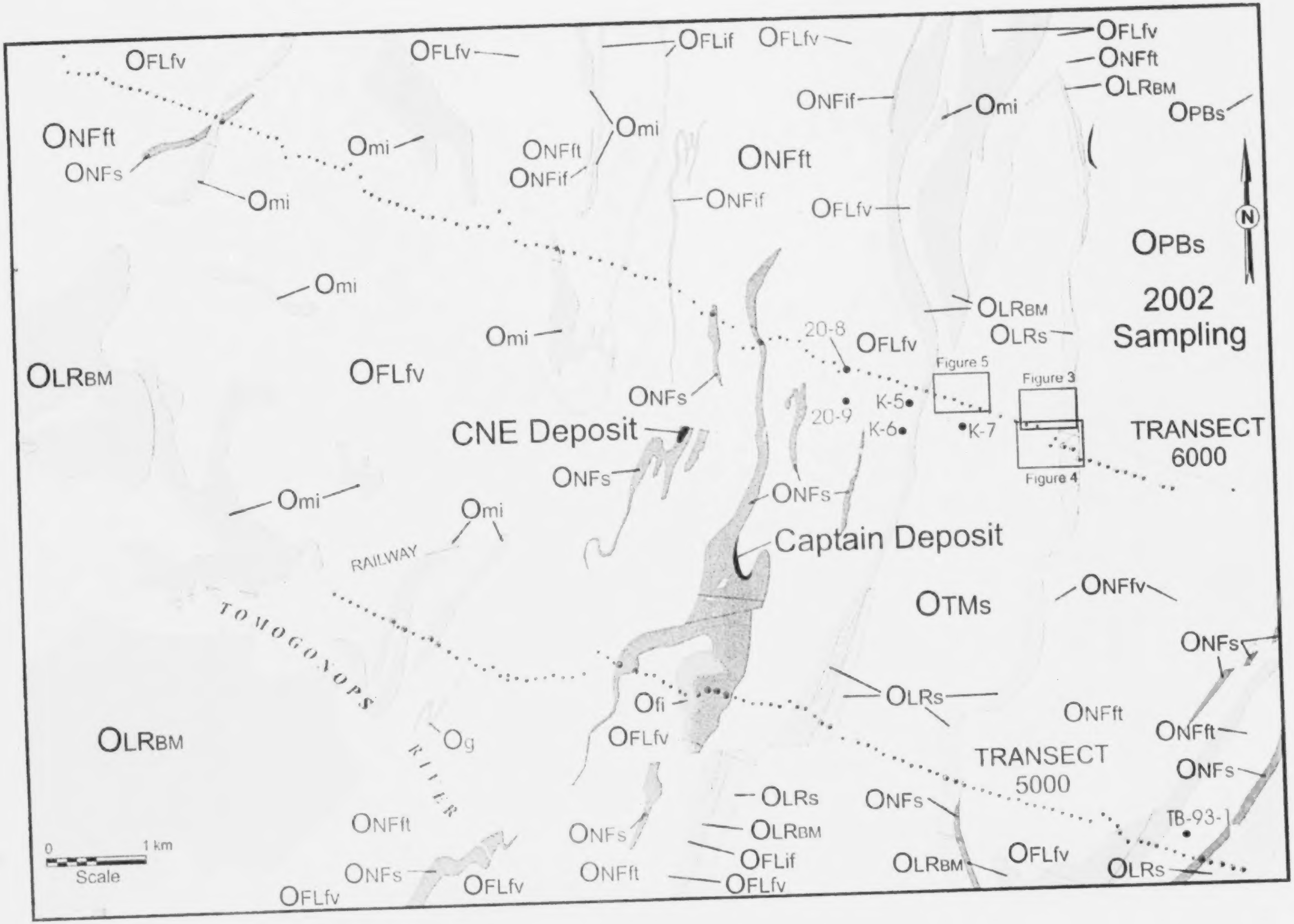
The QPX results showed that the best indicators of the zinc rich body are Zn, Sb, Cd and Au on line L4S (unpublished data 2001). In contrast the QPX profile along L12S for Zn, Cd and Sb well away from the deposits does not show any substantial enrichment except near the VMS deposit that sub-outcrops between 6W and 10W. Note this line does not cross directly over the deposit but comes within 50 m of it. One or more of these elements showed conspicuous enrichment in the above mentioned elements directly over the deposits. The mineralized host-bearing trough was also identified (G. Woods, pers. comm.). Where lines crossed over areas well away from known mineralization there are no anomalies. For the purposes of this study the "classical" or normal method of determining what is anomalous was not used. For example the normal way to determine what is an anomaly is to determine the mean and then add 1, 2, or 3 etc. Standard Deviations (SD). However, to use this method some assumptions have to be made. For example, is the population a normal or a log normal one? Instead of using the normal statistical method an empirical method was used where the soil profiles were plotted and then visually inspected to see if there were any zones of enrichment in the ore element concentrations in the soil directly over the hidden VMS deposit. The strength of the contrast between background and "anomalous" is dependant on many factors such as how deep the hidden deposit is buried, the metal grades, type of overburden-barren cap rock and the density of fracturing that determines the amount and rate of de-gassing. Therefore, during the development of the precursor SMX and the present QPX, it was found from tests that the best way to describe the "anomalous zone" is to use the term enrichment of the element being considered. It this case the location of the zone of enrichment (in respect to a local background concentration) is more important than the absolute magnitude of the concentration. In addition, it is very important to have other independent information available such as magnetic or EM geophysical data to see if there is any coincidence of anomalies. Coincidence of multi-parameters would be given a higher priority to a potential drill target than one parameter alone. This protocol is used throughout this report.

The classical way of treating geochemical data was to find the mean and then add 1 standard deviation, 2 standard deviations etc. and then arbitrarily choose 3 standard deviations and above as being anomalous. This method depends on the assumption that the data set is a normal one. There are no valid reasons why this should be true (C. Beaudry, pers. comm.). A more complete treatment of this subject can be found in Govett et al. (1975).

## 5.0 Reconnaissance Transects

### 5.1 Introduction and Analytical Methods

The two transect lines (Figure 2, Plate 2003-7A), which are approximately parallel and about 4 km apart, were selected for QPX reconnaissance sampling by geologists from the DNR Bathurst Office. These lines, which have an azimuth of approximately 115°, traverse highly prospective ground in the


OPBs
2002
Sampling
TRANSECT
6000
TRANSECT
5000
N
Figure 3
Figure 4
Figure 5
20-8
20-9
K-5
K-6
K-7
TB-93-1
CNE Deposit
Captain Deposit
OTMs
OFLfv
ONFt
OLRBM
OPBs
OFLif
ONFif
Omi
ONFft
ONFs
OLRs
ONFfv
Ofi
Og
RAILWAY
TOMOGONOPS
RIVER
0
1 km
Scale

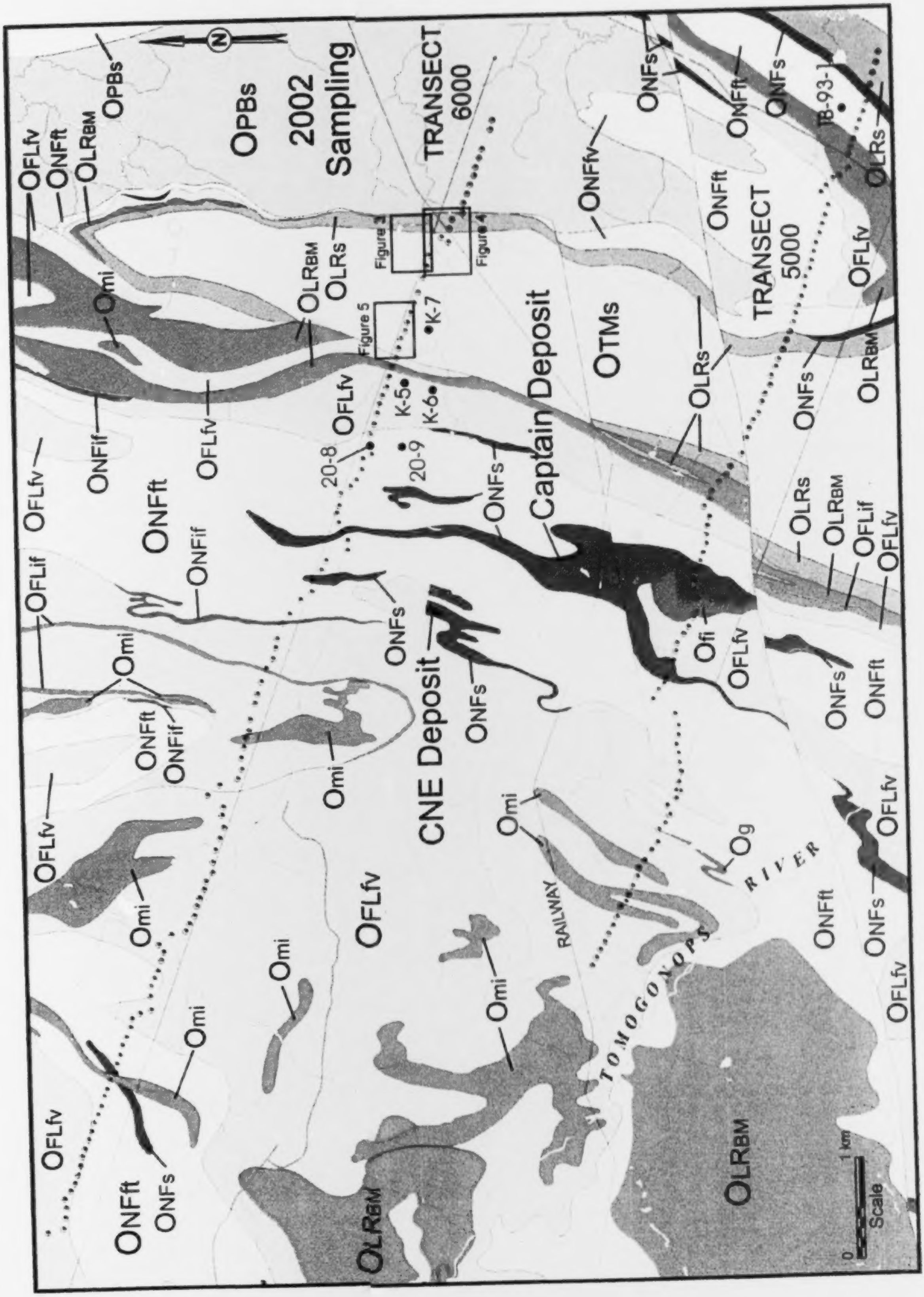

N
OPBs
2002
Sampling
TRANSECT
6000
TRANSECT
5000
Captain Deposit
CNE Deposit
OTMs
OFLfv
ONFft
OLRBM
OLRs
ONFs
ONFif
OFLif
ONFfv
Omi
Ofi
Og
Figure 3
Figure 4
Figure 5
K-5
K-6
K-7
20-8
20-9
TB-93-1
RAILWAY
TOMOGONOPS
RIVER
0
1 km
Scale

Figure 2 (opposite). Location of QPX B-horizon soil sample sites on Transect 5000 and 6000, southeastern Bathurst Mining Camp, with location of detailed follow-up studies (Figure 3, 4 and 5). Bedrock geology after Langton 1996a, b, c and d. See Plate 2003-7A for the sample site numbers and the bedrock geology legend.

southeastern part of the BMC. For example, Transect 5000 crosses the Eastmain Resources Inc. Rail Road Prospect that was explored by drilling in 2001. Transect 6000 crosses the same geology that hosts the Gilmour South VMS Deposit found by Noranda. The object was to test the till covered prospective ground with the QPX method to see if any significant anomalous zones of enrichment could be detected in an area already extensively prospected.

The B-horizon soil was sampled every 100 m and the location of the sample site determined by a GPS reading that was accurate to ±10 m. The QPX soil concentrates were sent to Acme Laboratories Ltd in Vancouver, BC. The samples were then digested in hot Aqua Regia and analyzed by ICP-MS. Details of the soil sampling methodology are found in Section 4.2. Both transects cut across rocks of the Middle Ordovician Tetagouche Group. Transect 5000 is entirely within Tetagouche Group rocks whereas Transect 6000 extends into the underlying Miramichi Group.

## 5.2 Transect 5000 QPX Results

The data set for Transect 5000 is found in Appendix 1 and sample locations are shown in Figure 2 and Plate 2003-7A (sample numbers). The numbers of soil samples from each rock unit are as follows: OFLfv-28, Omi 3, ONFft-37, OCNEfi-2, OLRBM-8, OLRs-7, OTMs-11 and ONFs-6. Since the targets are Cu-Pb-Zn (Ag) massive sulphide deposits these ore elements will be given a higher priority for discussion.

### 5.2.1 Cu+Pb+Zn

Individual profiles for QPX Cu, Pb and Zn are shown on Plate 2003-7B along with the sum profile for these three elements. It can be seen from inspection of the QPX sum profile that there are three major clusters of elevated base metals in the soil. The first extends from site 5010 to 5019, the second from 5034 to 5047 and the third from 5081 to 5087. In each of these areas, the sums (Cu+Pb+Zn) add up to greater than 500 ppm. The first area (5010-5019) with elevated clusters of Cu+Pb+Zn is, from an absolute value point of view, only slightly less significant than the second cluster. However, from the stand point of drilling and other forms of exploration, this area has had much more work done. In 2001, Eastmain Resources Inc. drilled several holes that intersected thin high grade Zn mineralization. The largest sum is sample 5016, which is located very close to other drill holes and appears to be on strike with them. Samples 5010 and 5012 are right in the middle of the drill pattern. All holes are collared in rocks of unit OFLfv. The second cluster of elevated Cu+Pb+Zn is considered to be the most significant with a peak value of 1729 ppm. There are no known drill holes or exploration trenches in the area between samples 5034 to 5047. However, 500-1000 m along strike to the northeast, there are several drill holes all directed to the east. Also, about 2 km to the north and in the same bedrock geology, are several old diamond drill holes that tested the ground by drilling to the west and to the east.

In the third target area with elevated values, samples 5083-5085 have the largest Cu+Pb+Zn sums and are located near DDH TB-93-1 (Figure 2) (Kempster 1993). It is not known what was intersected in this hole.

The product profile for pathfinder elements As, Cd, Sb and Bi (Plate 2003-7B) shows three distinct areas of enrichment that coincide with airborne geophysical anomalies from the EXTECH-II survey (Plate 2003-7B). On inspection of the geophysical profiles one can immediately see that the western part of the traverse is relatively flat especially the higher frequency (C/4786Hz). From the mid-point of Transect 5000 to the east, the EM response becomes very active. In the area drilled (5008 to 5018) by Eastmain Resources Inc., there is a modest out of phase EM anomaly in the lower frequency (4433 Hz) and two small but clear magnetic blips that coincide with good zinc and modest lead geochemical anomalies. There is also a conspicuous cadmium and antimony enrichment, both common pathfinders for VMS deposits in the BMC.

In the central part of the line there is a very sharp and strong magnetic anomaly coincident with the great increase in the EM response. The QPX base metal and pathfinder element zones of enrichment are adjacent to two major geophysical anomalies, one between samples 5034 to 5047 and the other between samples 5081 to 5087.

### 5.2.2 CuxPbxZnxAu and Ag

One technique to increase the contrast between areas that show a local enrichment from a background concentration is to use a product of principal elements that are known to make up the deposit. It is generally known that ore elements and pathfinder elements show a greater variation over mineralization than over background areas. However, one must exercise caution as the absolute value of the product cannot be directly related to the grade of mineralization.

When CuxPbxZn is multiplied by Au and then this product is divided by 10000 (the numbers can get very large and cumbersome), the three areas discussed in the previous section stand out on Plate 2003-7B, which allows target areas to be prioritized more accurately. When the Ag concentration is multiplied by the base metal concentration product CuxPbxZn, a similar enhanced pattern emerges.

## 5.3 Transect 6000 QPX Results

For interpretation, the product CuxPbxZn (Plate 2003-7B) is used instead of the sum of the same elements because this gives a much better picture than the individual profiles for Cu, Pb and Zn. In conjunction with the base metal product profiles the normal pathfinder elements are also multiplied together to form a product profile (Plate 2003-7B). Any product (CuxPbxZn)/100,000 greater than 30 is considered significant. Pathfinder and elements that can signify hydrothermal activity and general alteration of the underlying bedrock are also considered. All data for Transect 6000 are listed in Appendix 2 and sample locations are shown in Figure 2 and Plate 2003-7A (sample numbers). Going from west to east along Transect 6000, the samples with elevated base metal concentration are 6118, 6101, 6105, 6093, 6096 to 6070, 6074-6075, 6077-6078, 6052 to 6053, 6015, 6024, **6032** and **6040 - 6001**.

The samples outlined in bold are considered to be the best anomalies and the later two anomalies had detailed follow-up work done on them, which is described in Section 6.0. The number of samples from each rock unit are as follows: OFLfv-56, ONFft-32, Omi-1, ONFs-3, OLRBM-1, OLRs-3, ONFif-1, OTMs-12 and OPBs-9.

### 5.3.1 MP016118

This sample is located at the extreme west end of the Transect 6000 and has a product [(CuxPbxZn)/100000] of 88, the second highest value found on this transect. This could be an important anomaly as there is no evidence of previous trenching or drilling in this area. This anomaly occurs over the Nepisiguit Falls Formation (unit ONFft). The sample shows a moderate value of about 1000 for the AsxCdxSbxBi product (Plate 2003-7B). Only three other samples have a higher pathfinder product and they occur far to the east. This sample also exhibits anomalous enrichment in Fe, Mn, Al, Mg and K (Appendix 2).

### 5.3.2 MP016101

This single point base-metal anomaly has a CuxPbxZn product value of almost 60 and is also near the west end of the Transect. The AsxCdxSbxBi product (Plate 2003-7B) shows that there is a strong positive correlation with the base metal anomaly. This sample also has an elevated concentration of Ag, Mo, Fe, Th, La, Cr, Ba, K, Sc, Tl, S, Se, Sn and Zr. There are no known drill holes or trenches in this area so it would have to be considered a new geochemical target.

### 5.3.3 MP016105

This base-metal anomaly has a product of about 60 and has a very similar signature as 6101 but the product of AsxCdxSbxBi is only about half that of 6101. This sample has elevated concentrations of the following elements Ag, Fe, As, Th, Sr, La, Ba, Al, K, Sc, Ga, Sn and Zr, including the highest concentration of Zr in the whole data set. This sample is located very close to the contact between the rock units OFLfv and ONFfv.

### 5.3.4 MP016093

This sample has a similar level of enrichment as 6101 and 6105 but a negligible concentration of As, Cd, Sb and Bi. The area of elevated base metals lies over unit ONFft. Like the other two anomalies there are no drill holes or known trenches in the immediate area. There are no other elements that have significant elevated concentrations in this soil sample. Of interest is the adjacent sample, 6094, that has an AsxCdxSbxBi product of 851 but is not anomalous in base metals.

### 5.3.5 MP016096 to MP016070

This cluster of samples with elevated base metals (Plate 2003-7B) could be considered a broad zone of metal enrichment with most product values above 25. The samples with by far the greatest enrichment of As, Cd, Sb and Bi are samples 6098 and 6099. One or more of the samples are enriched in Mo, Co, Mn, Fe, Sr, La, Mg, Ba, K and S. The two samples with the highest concentration are directly over unit OFLfv. There does not appear to be any previous drilling or trenching in this area.

### 5.3.6 MP016052 and MP016053

From a base-metal point of view, this is by far the strongest zone of enrichment. Sample 6052 has a product value of 197. To make the profile chart more readable the values were divided by 100,000 resulting in a maximum profile value just under 200. The area is highly enriched in As, Cd, Sb and Bi, coincident with the base metal anomalies and extending at a lower concentration level for about 500 m.

This anomaly lies at the contact between unit OFLfv and ONFft. The geological map indicates the units are separated by an iron formation. (See Plate 2003-7A in the back pocket of the report).

These samples are enriched in one or more of the following elements: Ag (greatly enriched with a concentration of 2800 Q ppb), Mn, U, Th, Sr, P, La, Mg, Ba, K, Sc, Tl, Se, Ga and Sn (Appendix 2). This has to be considered one of the best base metal targets on Transect 6000. It is interesting to note that there is substantial enrichment of As, Cd, Sb and Bi extending from 6057 in the west to sample 6052, 500 m to the east. It appears that the drilling may have been about 300 m too far to the west although the rocks seem to be dipping to the west (the drill holes were drilled in an easterly direction). Also 6052 is on or very close to being underlain by iron formation.

### 5.3.7 MP016015

This sample has a base metal product of almost 52 and an As, Sb, Cd and Bi product of 1000, well above the normal background concentration. This sample is also enriched in Mo, Ag, Co, Fe, Sr, V, Cr, Ba, K, Tl and Zr (Appendix 2). The enriched zone is in an area with no known drilling or trenching in the immediate vicinity. However, 500 m to the east drill holes (DDH 20-9, K-5 and K-6) are indicated on the geology map. Drill hole 78-9, which is located 300 m to the west and 300 m to the south, was drilled towards 6015 (underlain by unit ONFft).

### 5.3.8 MP016024

This sample has a base metal product of 40 and an As, Cd, Sb and Bi product value of over 2000, the third highest value along Transect 6000. This sample was taken from soil above the highly prospective Flat Landing Brook Formation (unit OFLfv). The sample is also enriched in Mo, Ag, Fe (very high), Au, Sr, V, P, Mg, Ti, S, Se, Ga and Sn (Appendix 2). On strike and 400 m to the west, DDH 20-8 (Brunswick Mining and Smelting Corp. Ltd. 1960) was drilled in the direction of the QPX geochemical anomaly. The DDH 20-9 (Brunswick Mining and Smelting Corp. Ltd. 1960), 250 m to the south, was also drilled toward the southward projection of this geochemical anomaly. Two hundred meters to the east and 200 m to the south are drill holes K-5 and K-6 (Figure 2), which tested ground up dip from this geochemical anomaly. It is not known what type of targets were drilled but they are very likely to have been some kind of geophysical anomaly. The geochemical anomalies may represent the near surface projection of mineralization.

### 5.3.9 MP016032

This base-metal anomaly occurs on the western limb of an overturned syncline in the Tomogonops Formation (unit OTMs). It is a relatively strong anomaly with a product value of 40. However, the product of As, Cd, Sb and Bi is only slightly higher than background. The sample was taken about 200 m to the north of DDH K-7 (Figure 2). The sample is also enriched in Mo, Ag, Ni, Co, Fe, U, Au, Th, Sr, Ca, P, La, Cr, Mg, Al, Na, K Sc, Ta, Se, Ga, Sn and Zr (Appendix 2). The large number of elements enriched in this sample leads one to suspect that the anomaly may reflect graphitic schist or an organic rich sedimentary rock, but there is the possibility that a massive sulphide deposit is buried beneath the younger sedimentary rocks. Diamond drill hole K-7, located about 200 m to the south of the sample site may have intersected this geochemical anomaly. More details are given in Section 6.4.1.

### 5.3.10 MP016040 and MP016001

This two-sample anomaly is on the east upright limb of the syncline mentioned above. What makes this QPX anomaly interesting is that there is a trench and a drill hole close to the two samples and a large old trench just to the southwest. Clearly a conventional geochemical target, or some geophysical target must have been evaluated in the past by trenching and/or drilling. Sample 6040 occurs in soil above the Tomogonops Formation (unit OTMs) and sample 6001 occurs in soils above the Little River Formation (unit OLRs).

The base metal product is very strong but what makes these two samples unique is that there is a very large enrichment in As (greater than Zn). It is coincident with high Zn but with only a very slight enrichment in Pb and with only a background concentration in Cu. The samples are enriched in Ag, Au, Ni, Co, Fe, Mn, Th, Sr, show modest concentrations of Cd, Sb and Bi, V, P, La, Cr, Mg, Ba, Ti, Al, K, Sc, Tl, Se, Ga, Sn and Zr (Appendix 2). Although orientation surveys were never conducted over graphitic schist horizons, this geochemical signature is considered to be atypical of a VMS deposit, but could create a much more complex geochemical signature. In order to further define the anomaly, a 5-line E-W grid was centered over the two anomalous soil samples. Details are given in Section 6.0.

### 5.3.11 Airborne Geophysical Data

To help evaluate the QPX geochemical results, line profile magnetic and electromagnetic (EM) data for the two transects were extracted from the EXTECH-II airborne dataset by Larry Petrie and are shown as stacked profiles in (Plate 2003-7B). The magnetic activity on the western half of transect 6000 may be associated with a general broad area of Zn and Pb enrichment. There is a close spatial association between the coplanar EM profile and the zone of Zn and to a lesser degree Pb and Cu around sample 6052 and 6053. There is also a correlation between a magnetic feature that lies within the broad anomaly extending from 6081 to 6087. Another interesting correlation occurs at the eastern end where there is a large coplanar EM anomaly (a smaller sub-peak) associated with samples 6040-6001 and a larger EM anomaly in the area around 6032. There is no magnetic anomaly related to the EM or geochemical (Zn-As) anomaly at 6040-6001. For Transect 5000 there does not appear to be any correlation between the magnetic data and the QPX anomalies, however, there appears to be a good correlation between the EM data and anomalous sample 5084.

## 6.0 Detailed Surveys

### 6.1 Introduction

A total of four areas were chosen for detailed QPX geochemical tests in 2002 (Figure1). Two are identified as Railroad 1 and 2, located at the eastern end of Transect 6000 where good base metal and pathfinder elements are enriched on opposite sides of an overturned syncline. These anomalies are located several kilometers from the CNE and Captain massive sulphide deposits. In addition, the QPX soil anomaly at Railroad 1 (6040-6001) lies on the same geological formation that hosts the Gilmour South deposit discovered by Noranda. This deposit is found several kilometers to the north.

The other two areas covered by detailed QPX soil surveys are near the Mount Fronsac and Camel Back massive sulphide deposits. North of Mount Fronsac, soil sampling was done along three separate lines that traversed three magnetic targets. Because the Mount Fronsac deposit has an associated magnetic signature it was thought that the QPX method could be used to check and see if a base metal anomaly had developed directly over the magnetic targets located within very prospective geology (unit OFLfv). Detailed soil sampling near the Camel Back deposit was done to try and determine if there are QPX geochemical anomalies associated with a thick iron formation to the east of the deposit in the Nepisiguit Falls Formation (unit ONFs). The three-line grid also crosses the other prospective rocks (units OFLfv and ONFft).

The same soil samples used for the QPX method were also used for conventional soil geochemical analysis so that the two techniques could be directly compared. It should be noted that the QPX results are generally much higher than conventional results and therefore the magnitude of anomalies cannot be directly compared. However, a conventional anomaly should also give a QPX anomaly but of a different order of magnitude.

### 6.2 Sampling Program and Analytical Methods

In August 2002, DSET Inc. relocated sample site 6040 by using a GPS to find old topofil string and red ribbon that marked the sample site. Access to the site was by driving along the abandoned Heath Steele Mine railroad. A total of 65 soil samples were collected with 1 field duplicate collected for every 20 samples collected. The actual starting point for the first east-west line on the Railroad 1 grid was placed 20 meters to the west and slightly south of the original sample site. This central grid line is labeled Line 3. Samples were collected every 20 m to 100 m east and west of the original site and then the next two samples were 50 m to the east and west respectively and finally the last two were 100 m farther to the east and west respectively (See Figures 3 and 4). Lines 2 and 4 have similar sample spacing but are 100 m to the north and south, respectively, of Line 3. Similarly, Lines 1 and 5 are 250 m farther to the north and south, respectively.

The lines were surveyed in using a compass and a hip-chain and were delineated by flagging tape. Then each sample site was marked and the station number recorder on a long piece of flagging tape. A GPS (Garmin 12), with a resolution better than ±3 m, was used to obtain the latitude-longitude of each site in decimal degrees.

The Railroad 2 grid was established with the same sampling plan as used for Railroad 1, except that only three lines were surveyed and sampled in detail (See Figure 5). The central line was approximately along Transect 6000. In addition, one line was sampled 100 m to the north and another line sampled 100 m to the south. Both are parallel to the Transect 6000 traverse. A total of 39 soil samples were collected. The details describing the sampling media, sample preparation and analysis are given in Section 4.2.

### 6.3 Railroad 1 QPX Results

There are two discontinuous geochemical "Zones" identified as Zone A and Zone B in Figures 3 and 4, with Zone A starting in the central part of the grid just west of Anomaly 6040-6001 on Line 3 and extending across Line 4 to Line 5, 350 m to the south. Zone B extends from Line 3 to Line 2 and commences about 100 m to the east of Zone A on Line 3.

#### 6.3.1 Zone A

Zone A extends from Line 3 to Line 5, 350 m to the south (Figure 4). This zone is primarily enriched in Zn with slightly elevated Cu. It is also enriched in Ag and Au and is associated with a very high As content. On Line 3, from sample 7001 to 7004 there are elevated concentrations of Zn, Ag, Ni, Sb, Sr,

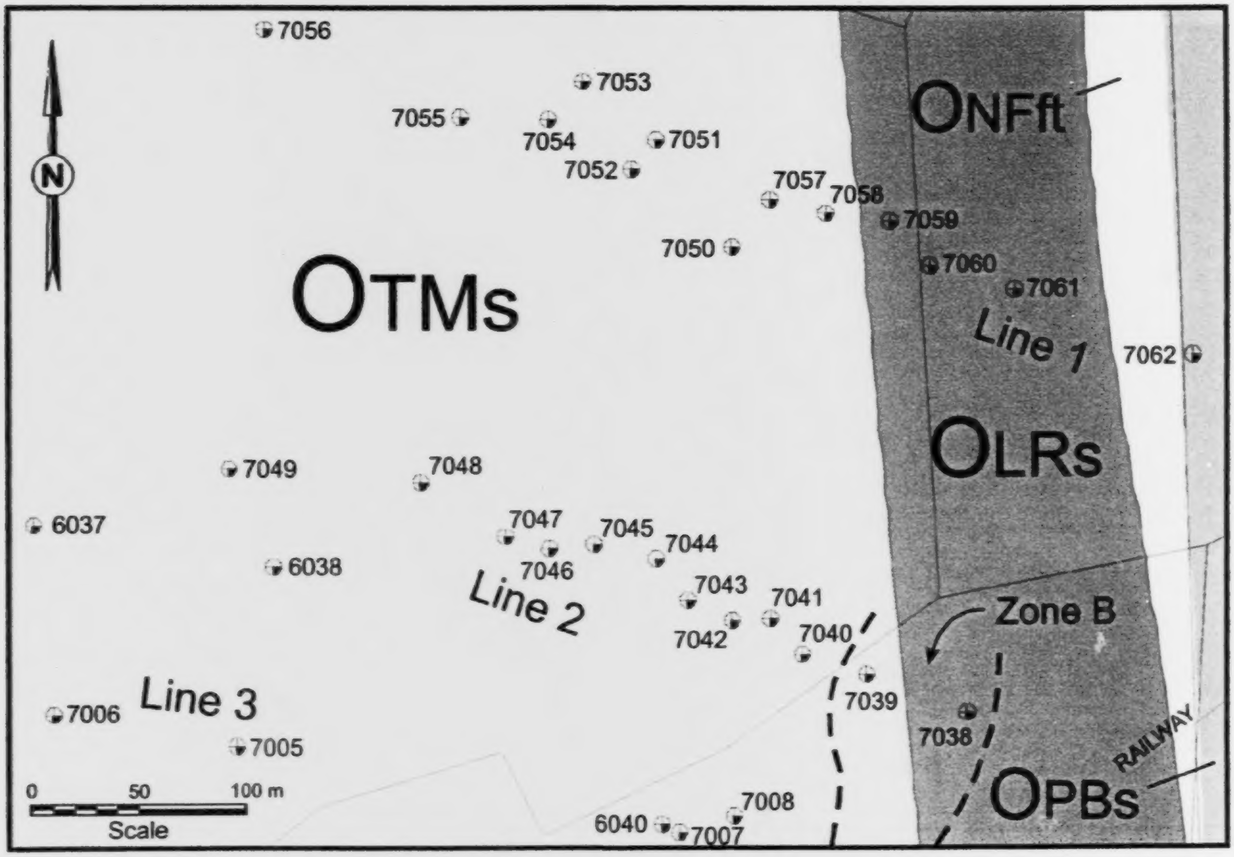

N
7056
7053
7055
7054
7051
7052
ONFft
7057
7058
7059
7050
7060
7061
OTMs
Line 1
7062
OLRs
7049
7048
6037
7047
7045
7044
6038
7046
Line 2
7043
7041
7042
7040
Zone B
7039
7006
Line 3
7005
7038
RAILWAY
0
50
100 m
Scale
7008
OPBs
6040
7007

Figure 3. Location of QPX B-horizon soil sample sites on the northern part of a detailed grid to follow-up anomaly at site 6040 (see Plate 2003-7A) on Transect 6000. Sample site numbers in 7000 series are prefixed by MP02 in Appendix 3a whereas site numbers in the 6000 series are prefixed by MP01 in Appendix 2. Bedrock geology after Langton 1996a, b, c and d. See Plate 2003-7A for the legend.

Fe, W, Ba, K, Mg, Al, La, Cr and V. On Line 4, samples 7014-7015 are enriched in the following elements: Zn, Cu, Ag, Au, Sr, Ni, Co, Cr, Sc, Tl, La, P, Ba and a very high concentration of As. On Line 5, soil sample 7030 is enriched in: Zn, Cu, Pb, Ni, Mn, As, U, Th, Sr, La, Sb, Bi, Ca, P, Mg, Ba, K, W, S and Se. The product profiles for base metal and pathfinder elements are found in Appendix 3b.

The zone does not show up on Line 2 but a weak anomaly on Line 1 at 7053, 350 m to the north may be on the same horizon. Sample 7053 is enriched in Zn, Pb, Ag, S, Ga (highest concentration in the grid), Sc, Al, K, Ba, Bi, Fe, Th, V, Se, Sr and La (Appendix 3a). Where Zone A has more than one adjacent sample that is anomalous it is important to remember that the sample interval is only 20 m. Thus Zone A is long in a north-south direction but is not very wide. This may indicate that the bedrock is steeply dipping and the mineralized host rock is narrow.

There is a trench that cuts across Line 4 at 7017 and almost extends to 7015 on Zone A. It is interesting to speculate what kind of target the trench was trying to examine. If the rocks dip to the west then the trench would be testing the downward extension of Zone A. The very high As content in the soil and wide range of elements enriched in this zone suggests the zone of enrichment may be related to a

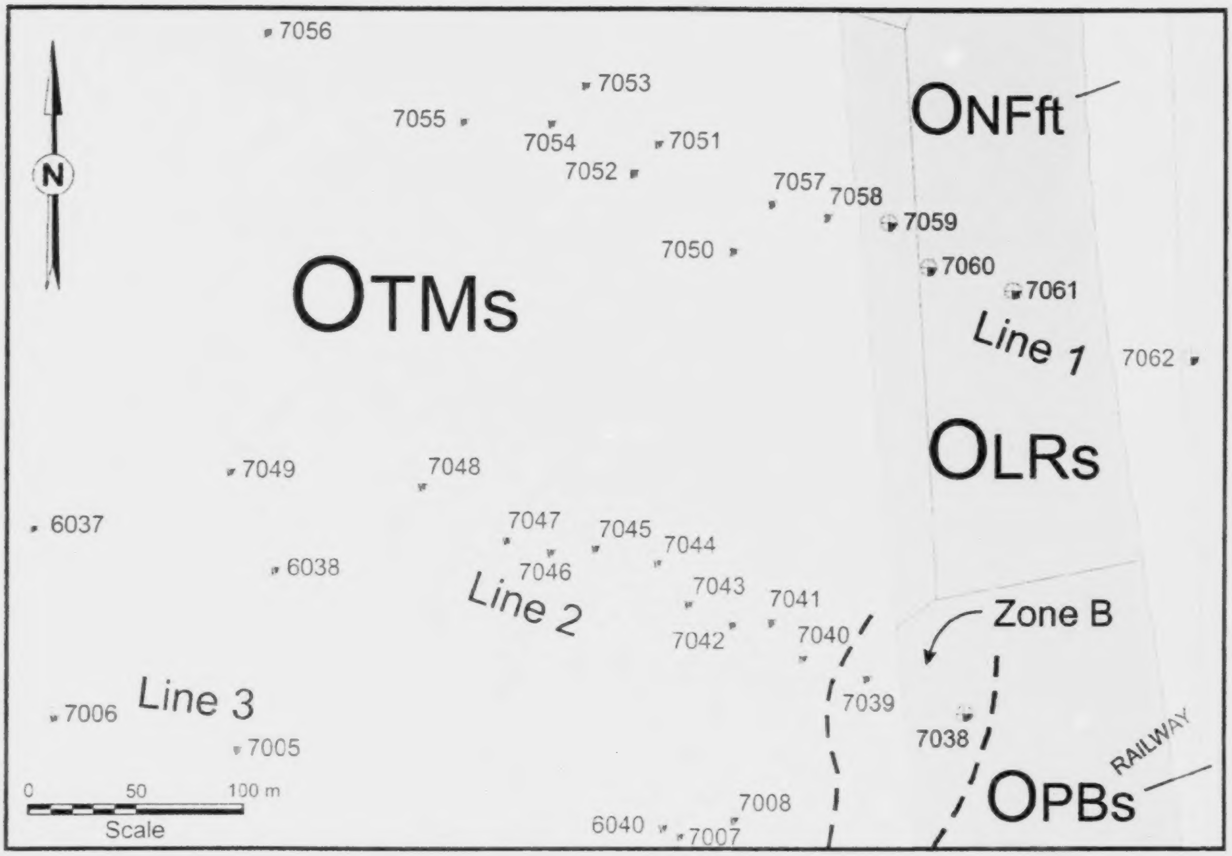

7056
7053
7055
7054
7051
7052
7057
7058
7059
7050
7060
7061
7062
ONFft
OTMs
Line 1
OLRs
7049
7048
6037
7047
7045
7044
6038
7046
Line 2
7043
7041
7042
7040
Zone B
7006
Line 3
7039
7038
7005
RAILWAY
OPBs
0
50
100 m
Scale
7008
6040
7007
N

Figure 3. Location of QPX B-horizon soil sample sites on the northern part of a detailed grid to follow-up anomaly at site 6040 (see Plate 2003-7A) on Transect 6000. Sample site numbers in 7000 series are prefixed by MP02 in Appendix 3a whereas site numbers in the 6000 series are prefixed by MP01 in Appendix 2. Bedrock geology after Langton 1996a, b, c and d. See Plate 2003-7A for the legend.

Fe, W, Ba, K, Mg, Al, La, Cr and V. On Line 4, samples 7014-7015 are enriched in the following elements: Zn, Cu, Ag, Au, Sr, Ni, Co, Cr, Sc, Tl, La, P, Ba and a very high concentration of As. On Line 5, soil sample 7030 is enriched in: Zn, Cu, Pb, Ni, Mn, As, U, Th, Sr, La, Sb, Bi, Ca, P, Mg, Ba, K, W, S and Se. The product profiles for base metal and pathfinder elements are found in Appendix 3b.

The zone does not show up on Line 2 but a weak anomaly on Line 1 at 7053, 350 m to the north may be on the same horizon. Sample 7053 is enriched in Zn, Pb, Ag, S, Ga (highest concentration in the grid), Sc, Al, K, Ba, Bi, Fe, Th, V, Se, Sr and La (Appendix 3a). Where Zone A has more than one adjacent sample that is anomalous it is important to remember that the sample interval is only 20 m. Thus Zone A is long in a north-south direction but is not very wide. This may indicate that the bedrock is steeply dipping and the mineralized host rock is narrow.

There is a trench that cuts across Line 4 at 7017 and almost extends to 7015 on Zone A. It is interesting to speculate what kind of target the trench was trying to examine. If the rocks dip to the west then the trench would be testing the downward extension of Zone A. The very high As content in the soil and wide range of elements enriched in this zone suggests the zone of enrichment may be related to a

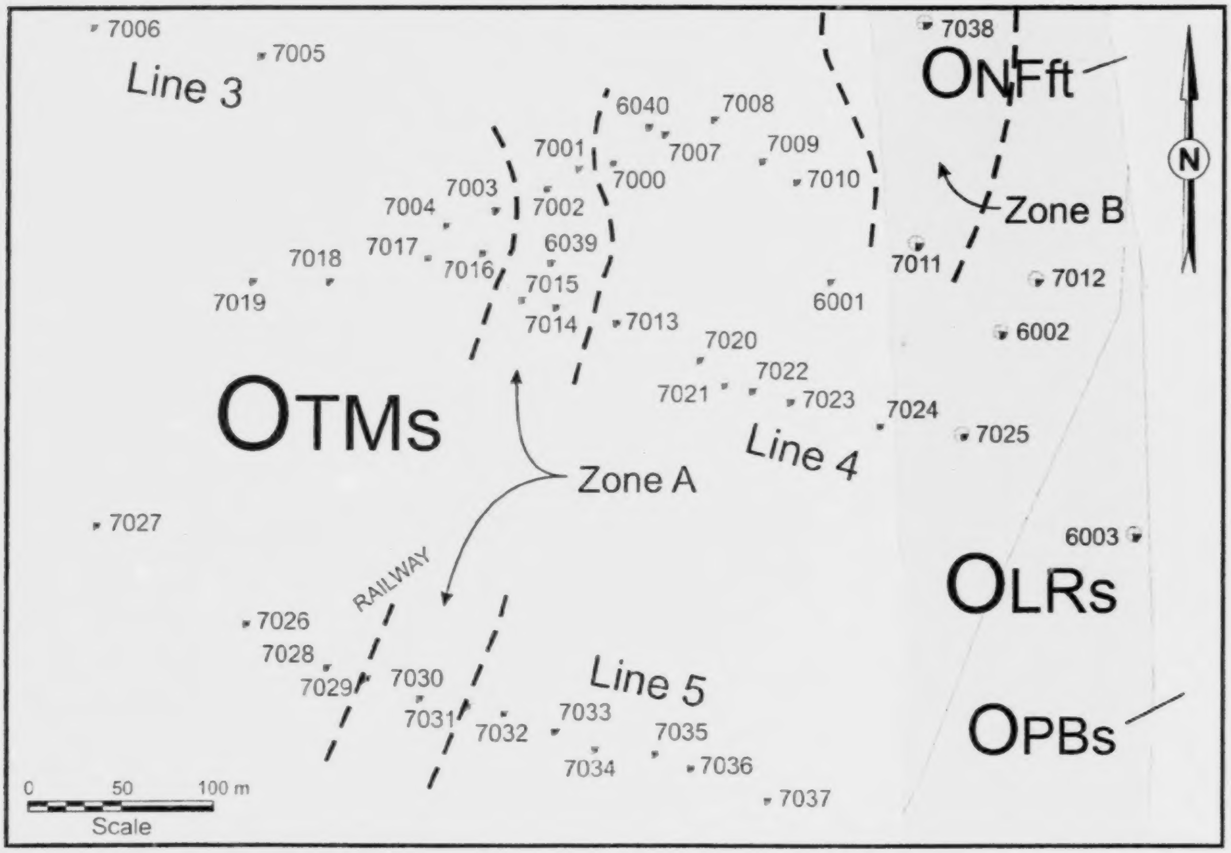

7006
7005
Line 3
7038
ONFft
6040
7008
7001
7007
7009
7000
7010
N
7003
7004
7002
Zone B
6039
7017
7018
7016
7015
7011
7012
7019
6001
7014
7013
7020
6002
7022
7021
7023
7024
OTMs
Line 4
7025
Zone A
7027
6003
RAILWAY
OLRs
7026
7028
7030
7029
Line 5
7033
7031
7032
7035
OPBs
7034
7036
0
50
100 m
Scale
7037

Figure 4. Location of QPX B-horizon soil sample sites on the northern part of a detailed grid to follow-up anomaly at site 6040 (see Plate 2003-7A) on Transect 6000. Sample site numbers in 7000 series are prefixed by MP02 in Appendix 3a whereas site numbers in the 6000 series are prefixed by MP01 in Appendix 2. Bedrock geology after Langton 1996a, b, c and d. See Plate 2003-7A for the legend.

graphitic horizon. If old drill holes are available, the core may reveal what this geochemical anomaly is derived from.

### 6.3.2 Zone B

Zone B (Figures 3 and 4) is confined to an area that extends from Line 3 northward 100 m to Line 2. This anomaly lies 100-150 m to the east of Zone A and is considered to be a very good Zn anomaly. The most interesting part of this anomaly is located on Line 2 at the sites 7038 and 7039, where there is a strong enrichment in Zn, Pb, Mn, Mg, Se, Cd and weak enrichment in Ba, S and As. Sample 7011, which is on the southern end of the zone on Line 3 (Appendices 3a and 3b), has a slightly different suite of enriched elements, i.e. Zn, Cu, Ag, As, Cd, Sb, Cr, Mg, Ba, Sr and Mn.

From the geochemical signature it seems less likely that this zone represents graphitic sedimentary rock. A recent DDH collared just to the north of sample 7008 was drilled to the east not far from Zone B. It is not known if this drill hole intersected any mineralization at depth. The geophysical airborne data show a very good correlation between the geochemical zone of enrichment and a magnetic high and a very strong and sharp EM anomaly.

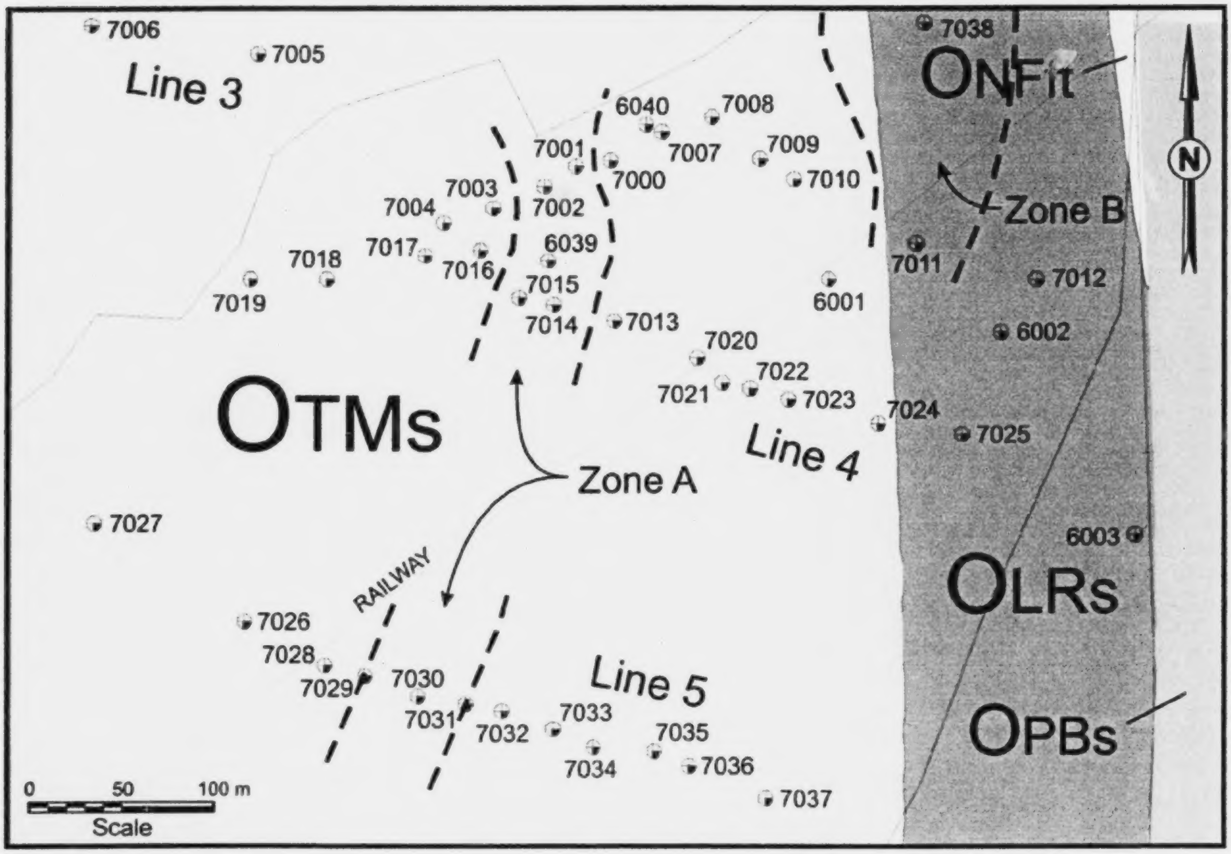

7006
7005
Line 3
6040
7008
7001
7007
7009
7003
7000
7010
7004
7002
7017
6039
7018
7016
7015
7019
7014
7013
6001
7020
7022
7021
7023
OTMs
7024
7025
Line 4
Zone A
7027
RAILWAY
7026
7028
7029
7030
7031
7032
7033
7034
7035
7036
7037
Line 5
0
50
100 m
Scale
7038
ONFit
N
Zone B
7011
7012
6002
6003
OLRs
OPBs

Figure 4. Location of QPX B-horizon soil sample sites on the northern part of a detailed grid to follow-up anomaly at site 6040 (see Plate 2003-7A) on Transect 6000. Sample site numbers in 7000 series are prefixed by MP02 in Appendix 3a whereas site numbers in the 6000 series are prefixed by MP01 in Appendix 2. Bedrock geology after Langton 1996a, b, c and d. See Plate 2003-7A for the legend.

graphitic horizon. If old drill holes are available, the core may reveal what this geochemical anomaly is derived from.

### 6.3.2 Zone B

Zone B (Figures 3 and 4) is confined to an area that extends from Line 3 northward 100 m to Line 2. This anomaly lies 100-150 m to the east of Zone A and is considered to be a very good Zn anomaly. The most interesting part of this anomaly is located on Line 2 at the sites 7038 and 7039, where there is a strong enrichment in Zn, Pb, Mn, Mg, Se, Cd and weak enrichment in Ba, S and As. Sample 7011, which is on the southern end of the zone on Line 3 (Appendices 3a and 3b), has a slightly different suite of enriched elements, i.e. Zn, Cu, Ag, As, Cd, Sb, Cr, Mg, Ba, Sr and Mn.

From the geochemical signature it seems less likely that this zone represents graphitic sedimentary rock. A recent DDH collared just to the north of sample 7008 was drilled to the east not far from Zone B. It is not known if this drill hole intersected any mineralization at depth. The geophysical airborne data show a very good correlation between the geochemical zone of enrichment and a magnetic high and a very strong and sharp EM anomaly.

## 6.4 Conventional Soil Data, Railroad 1 Anomaly MP016040 and MP016001, Transect 6000

### 6.4.1 Line 1 (Figure 3)

The conventional data (Appendices 7a and 8a) show low and very uniform concentrations of Cu, Pb, Zn and Ag. Sample 7053 has the highest QPX Zn concentration, which is about five times the lowest concentrations found along the line. The conventional Zn concentration (46 ppm) from this sample is only about two times the lowest concentration (Appendix7a, 8d).

### 6.4.2 Line 2 (Figure 3)

Samples 7038 and 7039 show a very marked Zn-As anomaly and a modest Pb anomaly at the extreme east end of the line. These samples also exhibit a QPX anomaly, part of the Zone B anomaly described in Section 6.3.2 What is interesting, is that the conventional As concentration (Appendix 8d) seems to reflect a sharp change in lithology starting at sample 7043 and extending eastward to the end of the line. A comparative data set between conventional analytical data and QPX method data is given in Appendix 7a.

### 6.4.3 Line 3 (Figure 4)

The conventional data shows very weak Cu and As enrichment at 7002, which is 60 m west of the original anomalous sample 6040. The QPX data show that sample 7002 is enriched in Ag, Zn, Cu, As and Sb. Sample 7007, which is very close to anomalous sample 6040, has elevated concentrations of both QPX and conventional Zn and As. A comparison between the two methods is shown in Appendix 8d. Samples 7010 and 7011 are both enriched in Zn with sample 7011 having 514 ppm Zn. Only the latter sample has a QPX anomaly, which is part of the Zone B anomaly.

### 6.4.4 Line 4 (Figure 4)

Samples 7015 and 7014 and samples 7023 and 7022 are anomalous. Sample 7015 shows enrichment of about 1.5 times for Zn (Appendix 8d) and is anomalous in both Ag and As, with a weak enrichment in Sb. In contrast, the QPX data show the highest concentration of Cu (about two times average value) at this site and the highest Zn (585 Q ppm), Ag and As (1568 Q ppm). This site is also slightly enriched in Bi. Sample 7023 has the highest concentration of Zn (conventional) but does not exhibit a QPX anomaly in Zn, although sample 7022 does but the concentration is less than a third of the anomalous sample (7011) found on Line 2. Interestingly, both methods show that the concentration of As at sites 7021 and 7022 is elevated.

### 6.4.5 Line 5 (Figure 4)

Except for As (Appendices 7a and 8d), conventional geochemistry does not show any anomalous values. The As concentration is significantly enriched in samples 7030 to 7033. In contrast, the QPX data show elevated Cu, Pb, Zn with an associated As anomaly at samples 7030 and sample 7033.

## 6.5 Railroad 2 QPX Results

### 6.5.1 Introduction

The original anomaly 6032 lies about 700 m to the west of the Railroad 1 Anomaly (6040 and 6001) on the west limb of an overturned syncline (Figure 5). As on the other side of the syncline, the prospective volcanic rocks are overlain by sedimentary rocks of the Tomogonops Formation (unit OTMs). Most exploration has been directed at testing electromagnetic (EM) and magnetic anomalies near the margin of the syncline where the covering sedimentary rocks are thinner. Airborne EM and magnetic data show that the geochemical anomalies at 6040 and 6001 and 6032 occur within very significant geophysical anomalies (Appendix 3b and Plate 7b).

### 6.5.2 Zone C

There is only one significant QPX anomaly and it is labeled Zone C in Figure 5. The anomaly occurs on Line 8 (Appendix 3b) and extends 200 m northward to Line 6 in an almost N-S direction. However, on Line 7, in the middle, only one sample, 7066, shows weak enrichment, possibly because the B-horizon soil is poorly developed in this area.

On Line 8, the anomalous zone extends over a width of 40 m, from sample 7084 to sample 7086. The samples are enriched in Zn, Cu, Pb, Ag, Au, U, Th, Sr, Bi, Sb, Fe, As, V, Cr, Mg, Al, Sc, Ga, La, Ba and K (Appendices 3a and 3b). The suite of elements i.e., high concentrations of V, Fe, Cr, U, Th, etc., suggests the enrichment may be the result of graphitic schist. This type of rock is known to be a scavenger of almost every element because of its high carbon content. Another interpretation is that the anomaly reflects a significant hydrothermal event associated with VMS deposition. The correct interpretation may lie in the examination of the drill log from DDH K-7, a hole that was drilled to test a geophysical target (Kontiki Lead and Zinc Mines 1953). The hole apparently was collared about 100 m to the south and 40 m to the west of the original anomaly (6032), based on the map of Langton (1996c). This hole was drilled to the east and intersected approximately 130 m (400') of "phyllite".

On Line 7, the only sample showing some Zn enrichment is 7066, which is located 100 m north of the anomaly on Line 8. This line passes over wet ground with poor soil development in the upper part of the till, which may be the reason the geochemical response is poor. The elements Cu, Pb, Zn, Mo, Fe, Ag, As, Sr, Bi, V, Cr, Al and Ga show some enrichment when compared to the results from other samples along this line.

On Line 6, there is a 60 m zone of weak enrichment (sample 7093 to 7096) that constitutes the rest of Zone C. The slight enrichment in Zn, Mo, Ag, Mn, Fe, U, Au, Sr, Sb, Bi, Cr, Mg, B, Al, Ga and S may be related to graphitic sedimentary rocks.

## 6.6 Conventional Soil Data, Railroad 2 Anomaly 6032, Transect 6000

### 6.6.1 Line 6 (Figure 5)

The conventional geochemistry does not show any appreciable enrichment in Cu, Pb, Zn, or As (Appendix 7a). However, samples 7093 to 7097 show a slight enrichment in Ag and Sb, both with concentrations just above the detection limit. The QPX data do not show any enrichment in Cu or Pb,

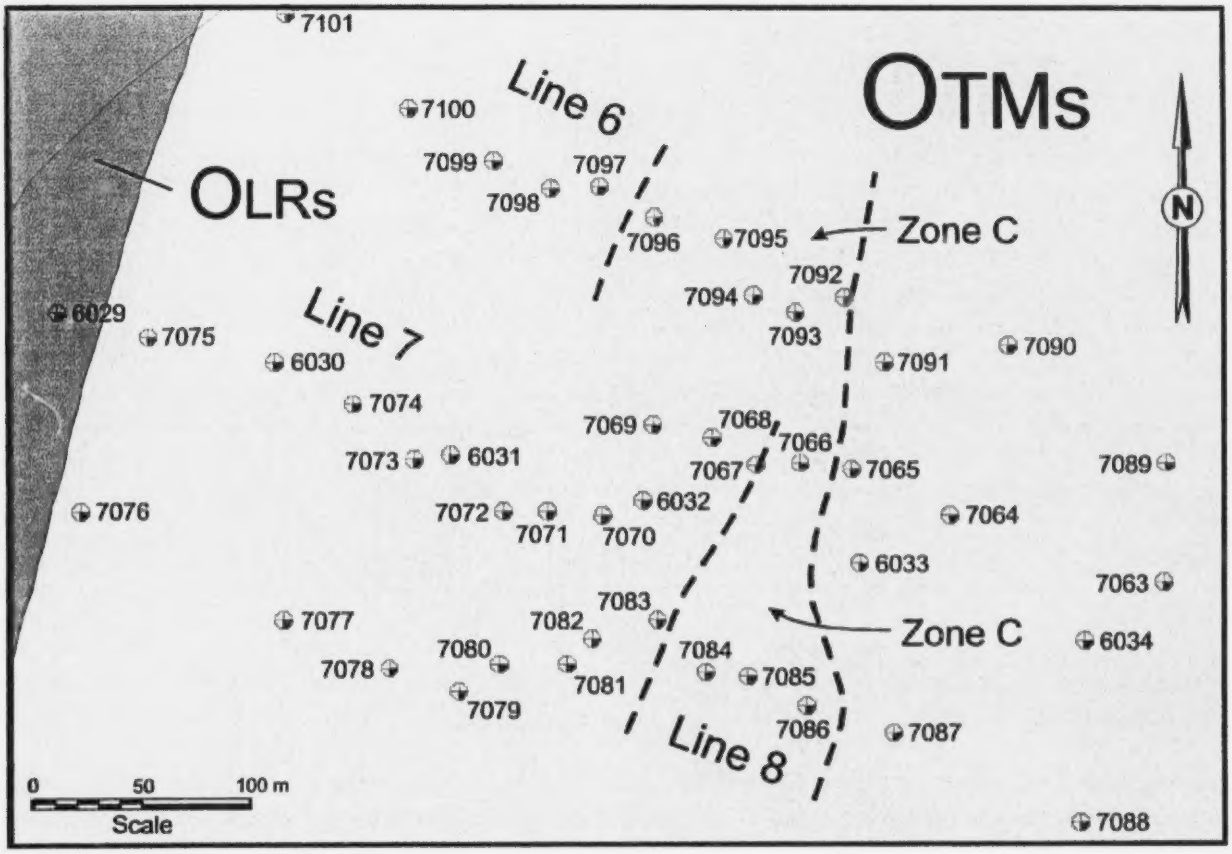

7101
7100
Line 6
OTMs
7099
7097
OLRs
7098
N
7096
7095
Zone C
7092
7094
6029
Line 7
7075
7093
6030
7091
7090
7074
7069
7068
7066
7073
6031
7067
7065
7089
7076
7072
7071
7070
6032
7064
6033
7063
7083
7077
7082
Zone C
6034
7080
7084
7078
7081
7085
7079
7086
7087
Line 8
0
50
100 m
Scale
7088

Figure 5. Location of QPX B-horizon soil sample sites on the northern part of a detailed grid to follow-up anomaly at site 6032 (see Plate 2003-7A) on Transect 6000. Sample site numbers in 7000 series are prefixed by MP02 in Appendix 3a whereas site numbers in the 6000 series are prefixed by MP01 in Appendix 2. Bedrock geology after Langton 1996a, b, c and d. See Plate 2003-7A for the legend.

but have elevated Zn (sample 7094) and Ag (samples 7093, 7094 and 7096). A comparison between the conventional and QPX (Zn) data is illustrated in Appendix 8d.

### 6.6.2 Line 7 (Figure 5)

The conventional data do not show any anomaly along this line (Appendix 8d). However, samples 7071 and 7066, have marginally higher Zn, Ag and (Pb) than typical for this line.

### 6.6.3 Line 8 (Figure 5)

Conventional geochemistry does not show any significant increase in any of the elements i.e. Zn (Appendices 7a and 8d). There is a slightly elevated Ag (just above the detection limit) at sample 7080, Pb at samples 7084 and 7085 and As at sample 7085 (Appendix 7a). The QPX results show a zone of enrichment from sample 7084 to 7085 where there is some enrichment in Cu, Pb, Zn, Ag, As, Cd, Sb and Bi.

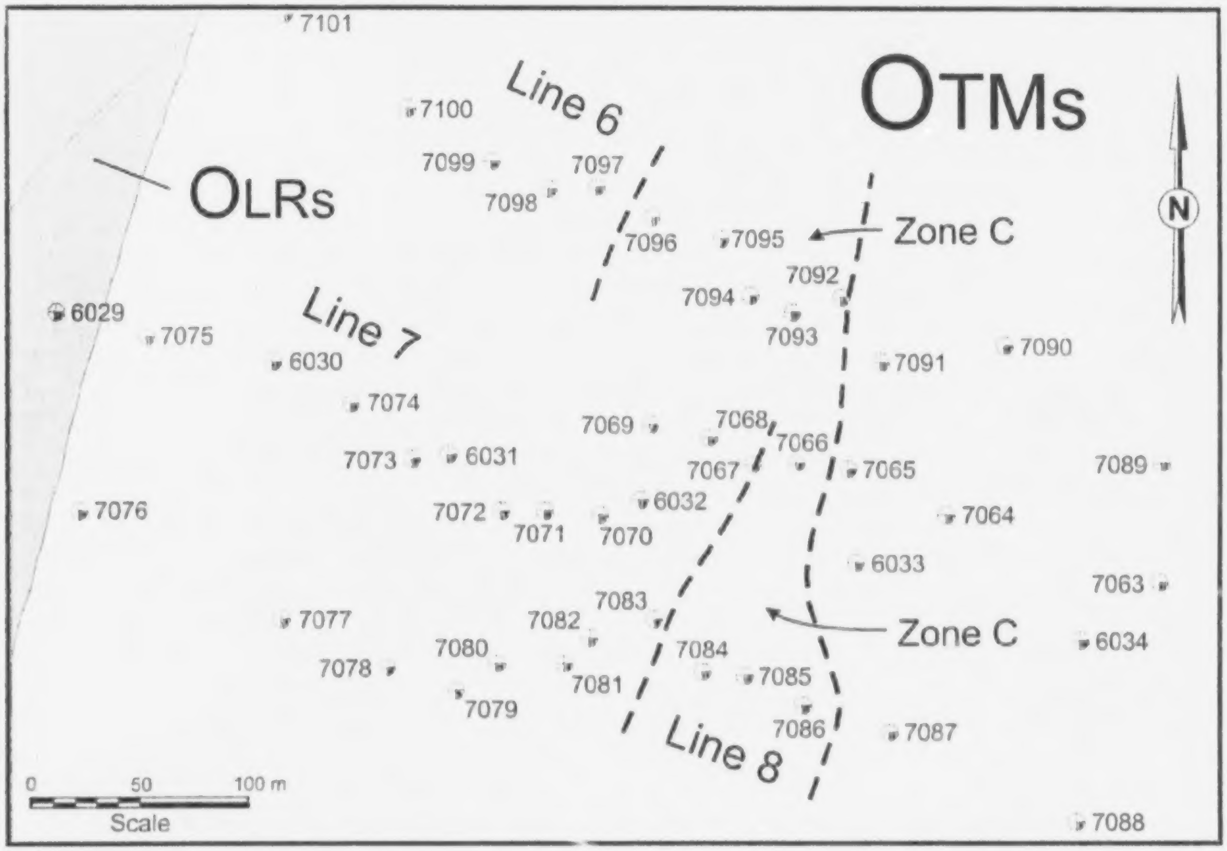

7101
OTMs
Line 6
7100
7099
7097
OLRs
7098
7096
7095
Zone C
7092
6029
Line 7
7094
7075
7093
7090
6030
7091
7074
7069
7068
7066
7073
6031
7067
7065
7089
6032
7076
7072
7071
7070
7064
6033
7063
7083
7077
7082
Zone C
6034
7080
7084
7078
7081
7085
7079
7086
7087
Line 8
0
50
100 m
Scale
7088
N

Figure 5. Location of QPX B-horizon soil sample sites on the northern part of a detailed grid to follow-up anomaly at site 6032 (see Plate 2003-7A) on Transect 6000. Sample site numbers in 7000 series are prefixed by MP02 in Appendix 3a whereas site numbers in the 6000 series are prefixed by MP01 in Appendix 2. Bedrock geology after Langton 1996a, b, c and d. See Plate 2003-7A for the legend.

but have elevated Zn (sample 7094) and Ag (samples 7093, 7094 and 7096). A comparison between the conventional and QPX (Zn) data is illustrated in Appendix 8d.

### 6.6.2 Line 7 (Figure 5)

The conventional data do not show any anomaly along this line (Appendix 8d). However, samples 7071 and 7066, have marginally higher Zn, Ag and (Pb) than typical for this line.

### 6.6.3 Line 8 (Figure 5)

Conventional geochemistry does not show any significant increase in any of the elements i.e. Zn (Appendices 7a and 8d). There is a slightly elevated Ag (just above the detection limit) at sample 7080, Pb at samples 7084 and 7085 and As at sample 7085 (Appendix 7a). The QPX results show a zone of enrichment from sample 7084 to 7085 where there is some enrichment in Cu, Pb, Zn, Ag, As, Cd, Sb and Bi.

## 6.7 Mount Fronsac Massive Sulphide Deposit

### 6.7.1 Introduction

A three-line soil survey (Figures 6) was completed over three magnetic features north of the Mount Fronsac massive sulphide deposit. These magnetic anomalies were identified by the EXTECH-II airborne survey but not adequately explained. The object was to test these magnetic features to see if they have QPX soil anomalies associated with them. The three magnetic anomalies are part of a group of magnetic anomalies that form a crude circular pattern.

Line 1 and Line 2 followed existing grid lines L8N and L16N respectively (Figure 7), which were established by Noranda Inc. (Rankin 1995). Samples were collected at 100 m sample intervals adjacent to and 50 m intervals directly over, the magnetic anomaly on each line using a hand auger. Fifteen B-horizon soil samples were collected on each line, although some samples were difficult to collect because the soil was very thin, erratic and rocky. Details on the sample preparation and analysis are given in Section 4.2.

Line 3 crosses over the weakest and northernmost magnetic feature and follows a road rather than grid line L24N because of this poor condition of the grid line. Soil samples were collected every 100 m. A very good B-horizon soil was present over the entire line.

### 6.7.2 Line 1 QPX Results

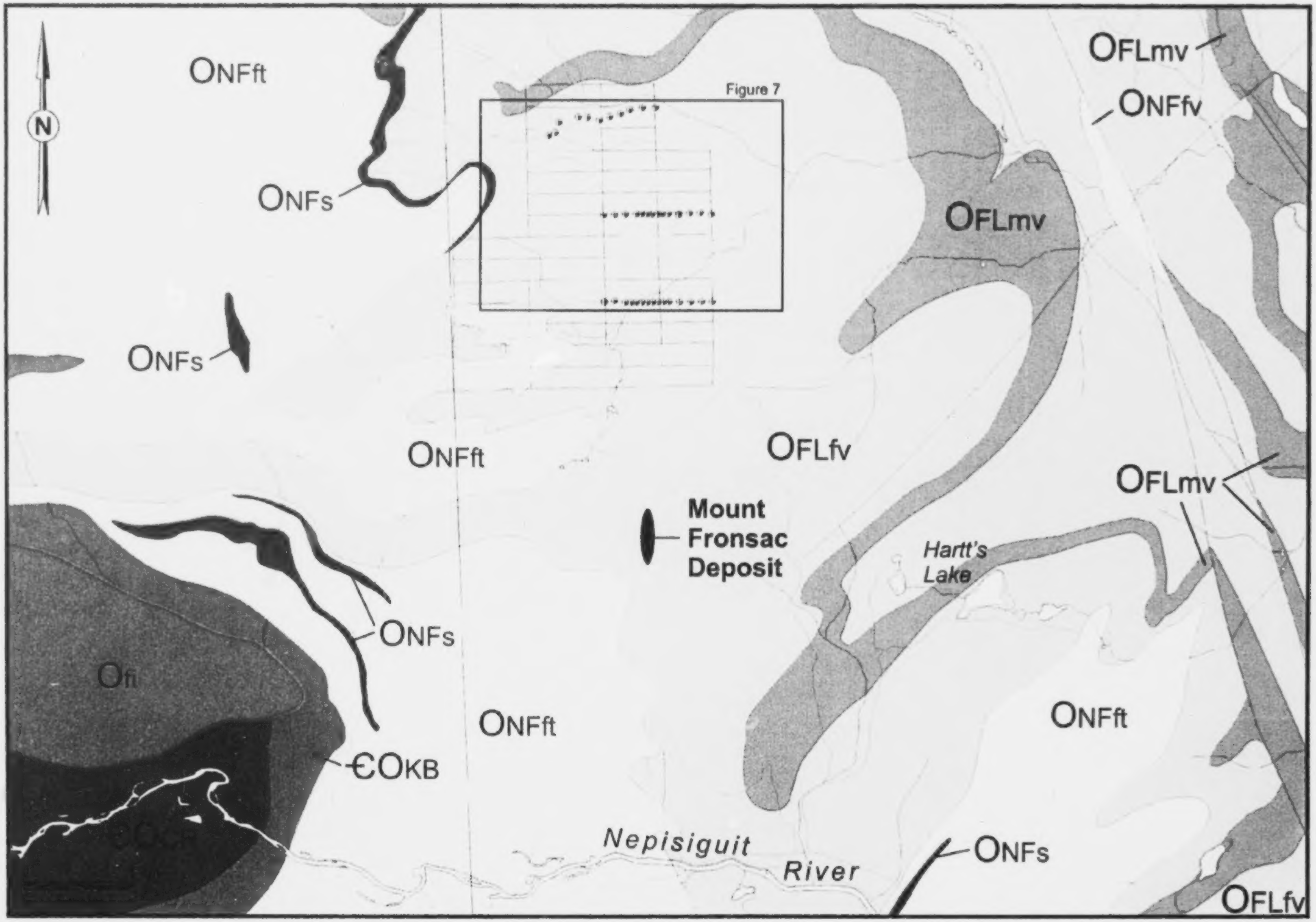
Samples 7102 to 7116 extend from TL-700E to TL-1700E going from west to east on Line 1. Samples 7104 and 7105 are anomalous with the latter having by far the highest CuxPbxZn product (Appendix 4b). These samples have a very high As (Appendix 4b) content and the Pb concentration is greater than that of Zn. Other elements that show some enrichment are Ag, Sb, Bi, Mg, Tl, Se and Ga (Appendix 4a). It may be useful to determine the metal ratios for the Mount Fronsac deposit to see if it is high in Pb and As relative to Zn. At the Heath Steele VMS deposit the Pb concentration was important (Govett et al. 1975) in indicating its economic grade. Sample 7110 was collected over the center of the magnetic feature and it has the second highest CuxPbxZn product on the line only being exceeded by sample 7105. Like sample 7105, the Pb concentration is greater than the Zn concentration. Other elements enriched in sample 7110 are Cu, Fe, As, Th, B, S, Cr and K.

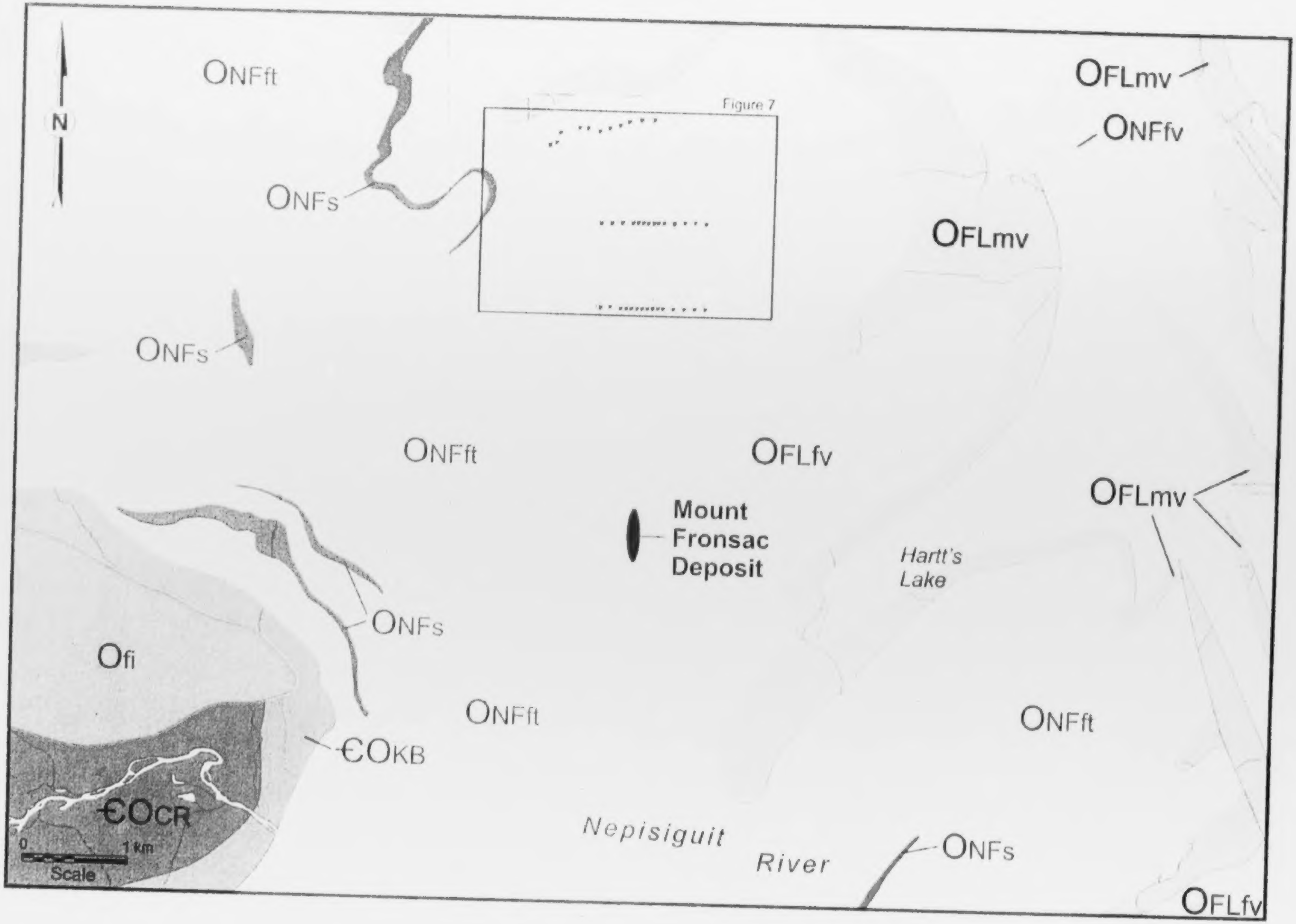
On the eastern flank of the magnetic feature sample 7114 shows some enrichment in Cu, Pb, Zn, Ni, As, Au, Bi, Mg and K (Appendix 4a). In this sample the concentration of Zn is greater than that of the Pb.

### 6.7.3 Line 1 Conventional Results (Figure 7)

Two sites along this line exhibit some base metal enrichment (Appendices 7b, 8b and 8e). One is at samples 7105 and 7104 and the other is between sample 7110 and 7114. These samples are found on the west and east flanks of the magnetic anomaly, respectively. The conventional anomaly located at

Figure 6 (over). Location of QPX B-horizon soil sample sites in the vicinity of the Mount Fronsac massive sulphide deposit. ЄOCR = Chain of Rocks Formation sedimentary rocks; ЄOKB = Knights Brook Formation sedimentary rocks OFLmv = Flat Landing Brook Formation mafic volcanic rocks; Ofi = Popple depot granite. For the rest of the bedrock geology see legend on Plate 2003-7A. Bedrock geology after van Staal et al. 2002.


N
ONFft
Figure 7
OFLmv
ONFfv
ONFs
OFLmv
ONFs
ONFft
OFLfv
OFLmv
Mount
Fronsac
Deposit
Hartt's
Lake
ONFs
Ofi
ONFft
ONFft
€OKB
Nepisiguit
River
ONFs
OFLfv


N
ONFft
Figure 7
ONFs
OFLmv
ONFfv
OFLmv
ONFs
ONFft
OFLfv
OFLmv
Mount
Fronsac
Deposit
Hartt's
Lake
ONFs
Ofi
ONFft
ONFft
€OKB
€OCR
0
1 km
Scale
Nepisiguit
River
ONFs
OFLfv

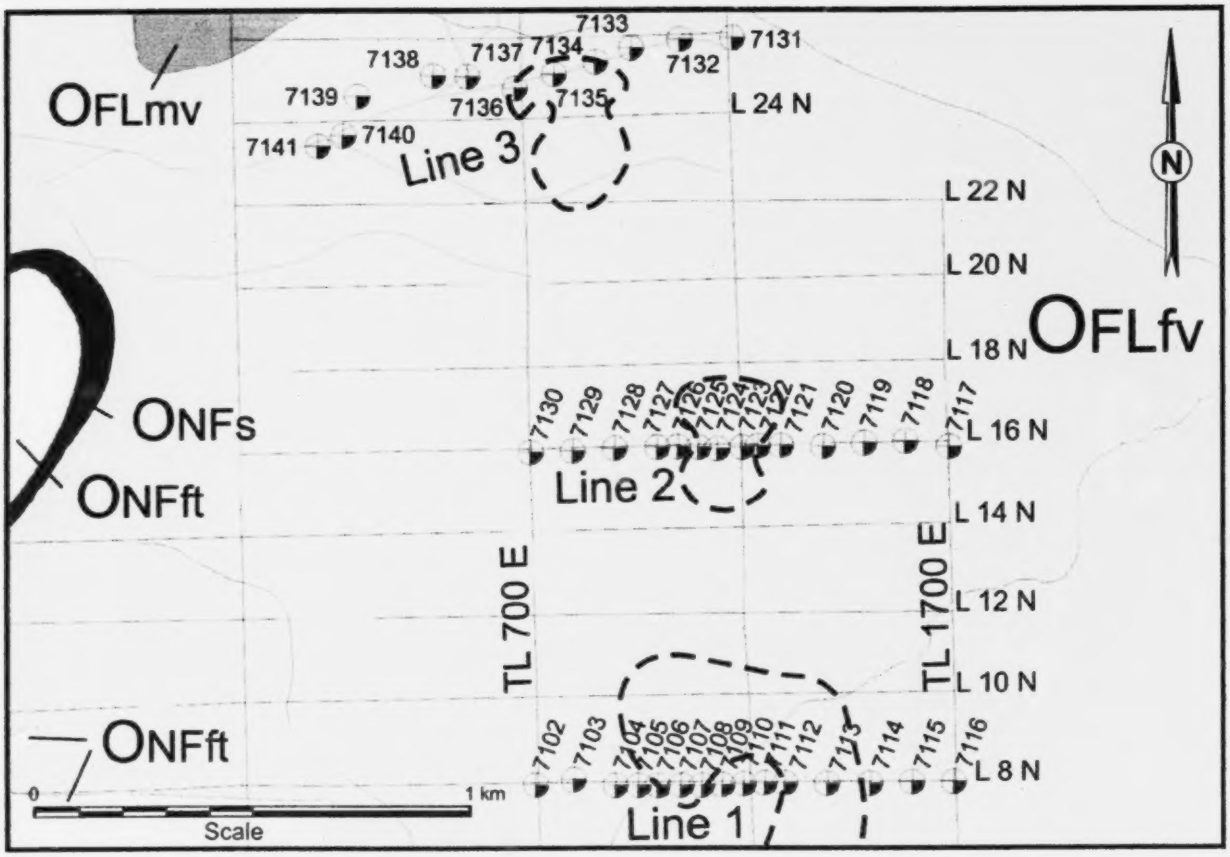

7133
7131
7138
7137
7134
7132
OFLmv
7139
7136
7135
L 24 N
7141
7140
Line 3
N
L 22 N
L 20 N
L 18 N
OFLfv
7130
7129
7128
7127
7126
7125
7124
7123
7122
7121
7120
7119
7118
7117
L 16 N
ONFs
Line 2
ONFft
L 14 N
TL 700 E
TL 1700 E
L 12 N
L 10 N
7102
7103
7104
7105
7106
7107
7108
7109
7110
7111
7112
7113
7114
7115
7116
L 8 N
ONFft
0
1 km
Scale
Line 1

Figure 7. Close-up of location of QPX B-horizon soil sample sites with sample site numbers in the vicinity of the Mount Fronsac massive sulphide deposit. Sample site numbers in 7000 series are prefixed by MP02 in Appendix 4a. OFLmv = Flat Landing Brook Formation mafic volcanic rocks. For the rest of the bedrock geology see legend on Plate 2003-7A. Bedrock geology after van Staal et al. 2002.

samples 7104 and 7105 is unusual in that the Pb concentration is higher than Zn. The samples also show enrichment in As and Ag. The QPX data also indicate a very good Pb anomaly with associated Ag, As, Sb and Bi enrichment, at this site. At the second site, conventional data show a weak Pb and As anomaly. The QPX results show slightly elevated Pb, Cu, Zn As, Sb and Bi.

### 6.7.4 Line 2 QPX Results

The QPX survey shows a good three-sample anomaly (7125 to 7127) directly over the magnetic high on Line 2 (Appendix 4b). Of the three samples the product of CuxPbxZn is about the same for sample 7126 and 7127, which are both high in Zn and Pb. In contrast 7125 is only moderately enriched in Zn and Pb and there are no other elements that are anomalous, unlike samples 7126 and 7128, which are enriched to some degree in Ag, Bi and B. It is intriguing as to why these zones of enrichment are essentially pure base metal anomalies.

The other sample that shows minor enrichment in base metals and other elements is sample ML027119 at the eastern edge of the magnetic high. This weak QPX anomaly is slightly enriched in Zn, Pb, Fe, Bi, V, Ba and Sc. The strength of this geochemical anomaly is much less than samples 7126 and 7127 so it is given a low priority.

### 6.7.5 Line 2 Conventional Results (Figure 7)

The highest Pb concentration (134 ppm) is found at sample 7127. Sample 7126 shows a slightly lower Pb concentration but is very slightly enriched in Cu, Zn and Ag. The QPX data show weakly anomalous Pb in samples 7122 to 7127. These samples also have elevated Zn, Ag, Sb and Bi (Appendices 7b and 8b). This is a good example that shows the QPX method to have significantly higher concentrations of all elements analyzed when compared to a conventional method.

### 6.7.6 Line 3 QPX Results

Line 3 traverses the weakest of the three magnetic targets in the study area. From inspection of the QPX data and the product of CuxPbxZn (Appendices 4a and 4b) only sample 7140 is significantly enriched relative to the average concentration along the line. Like Line 2, this QPX anomaly is essentially a base metal anomaly only with no associated pathfinder or alteration elements. Because of the weak QPX geochemical response this would not be given a high priority for more exploration.

### 6.7.7 Line 3 Conventional Results (Figure 7)

Conventional geochemistry shows a very modest Zn (Appendices 7b, 8b and 8e), (Pb) and As anomaly over the western edge of the magnetic anomaly from samples 7138 to 7141. The QPX data shows a more definitive geochemical anomaly in the same area. Neither type of geochemical survey indicates any significant anomaly along this line (Appendices 8b, 8d and 8e).

## 6.8 Camel Back Massive Sulphide Deposit

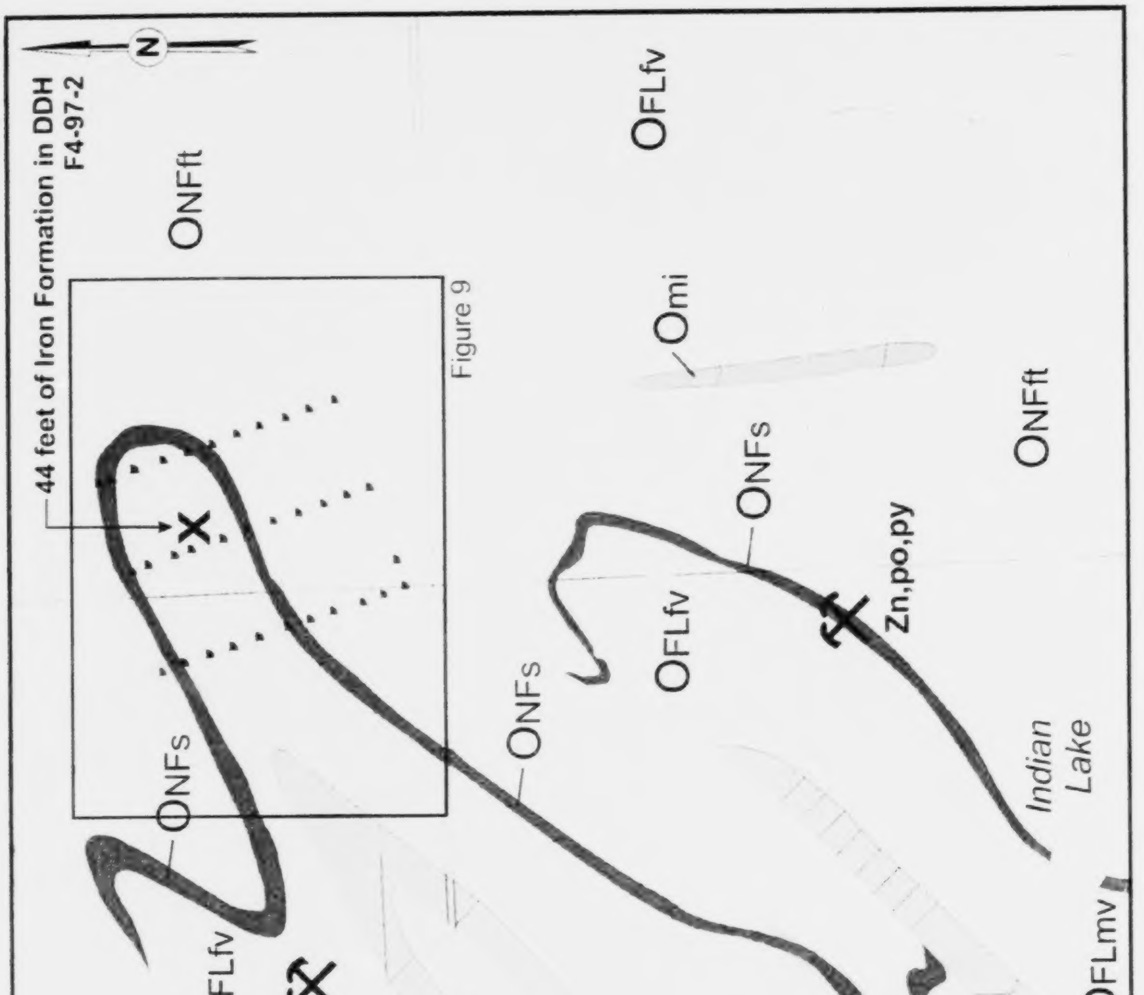
### 6.8.1 Introduction

The Camel Back massive sulphide deposit (Figures 8 and 9) is located about 2 km from the grid where the QPX soil survey was done. Another VMS occurrence, the Camel Back South, is located about two kilometres due south of the grid. In general, the B-horizon soil is well developed over the whole grid except adjacent to creeks or over areas with extensive rhyolite outcrops.

Three lines from an existing Noranda grid (Graves 1999) were selected, which cut across a syncline containing the Camel Back exhalative horizon. Lines 1, 2 and 3 follow grid lines 13E, 17E and 20E respectively, from tie lines 29S to tie line 19S. A diamond drill hole (DDH F4-97-2) on line 17E (Figure 9) which was drilled to the south, intersected 44 feet of iron formation (Graves 1999). The soil samples were collected every 100 m along the three one-kilometre long lines.

### 6.8.2 Line 1 QPX Results

Sample 7147 (Appendix 5b) exhibits the most enrichment and is on the contact between the unit ONFs and unit OFLfv (van Staal et al. 2002). This sample is enriched in Zn (400 Q ppm) and Pb (214 Q ppm) and to a lesser degree Ag, La, As, Sb, Ba and Bi (Appendix 5a). Sample 7146 shows weak enrichment of Zn, Ag, B and Al (Appendix 5a). In general, the background concentration of Zn is high over both units. On the northern limb of the fold, sample 7151 shows a very weak enrichment in Zn, Ag and


N
44 feet of Iron Formation in DDH F4-97-2
Figure 9
ONFft
OFLfv
Omi
ONFs
ONFs
ONFs
ONFs
OFLfv
Zn,po,py
ONFft
Indian Lake
OFLmv
OFLfv
Camel Back Deposit
OFLfv
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OFLmv
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OFLfv
OFLmv
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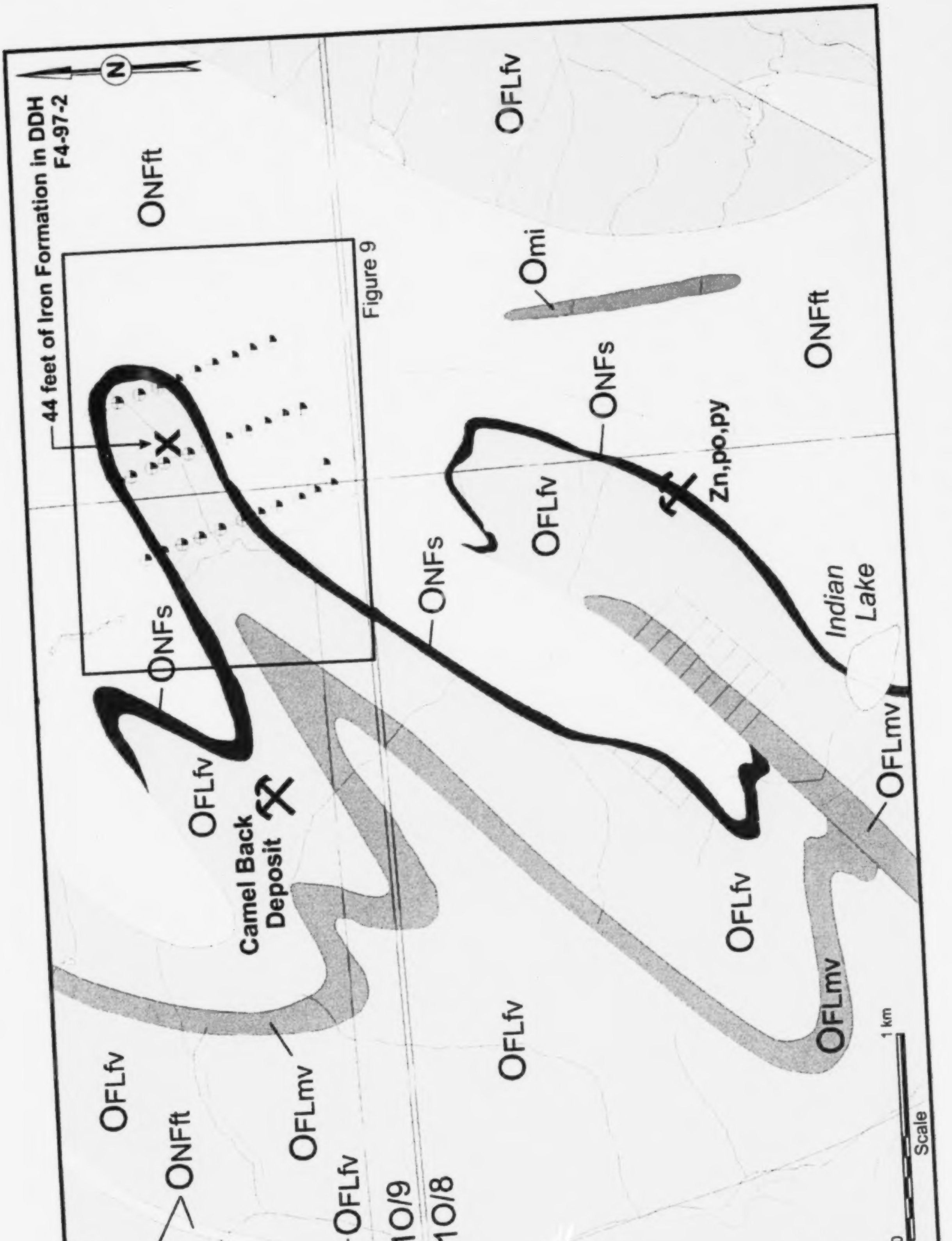
21O/8
0
1 km
Scale


44 feet of Iron Formation in DDH F4-97-2
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Zn,po,py
OFLfv
ONFs
Indian Lake
ONFs
OFLmv
OFLfv
Camel Back Deposit
OFLfv
OFLmv
OFLfv
OFLfv
OFLmv
OFLfv
ONFft
OFLfv
21O/9
21O/8
0
1 km
Scale

Figure 8 (opposite). Location of QPX B-horizon soil sample sites in the vicinity of the Camel Back massive sulphide deposit. OFLmv = Flat Landing Brook Formation mafic volcanic rocks. For the rest of the bedrock geology see legend on Plate 2003-7A. Bedrock geology after van Staal et al. 2002.

interestingly S. Although in absolute terms it has a low level of enrichment, when contrasted with the rest of the line, it is about 5 times enriched in these elements.

### 6.8.3 Line 1 Conventional Results (Figure 9)

The conventional data shows some weak Zn (Appendices 7c, 8c and 8f), (Cu) and As enrichment at sample sites 7146 and 7147. Notably, the conventional data show a better delineation of the Zn anomaly than the QPX data, which shows enrichment along the whole line. However, the QPX data also show an enrichment in Ag, Pb, (Cu), As, Cd and Bi (Appendices 7c and 8c).

### 6.8.4 Line 2 QPX Results

Sample 7158 is slightly enriched in Cu-Pb relative to the other samples along this line and only very slightly enriched in Zn. Other elements that show slight enrichment are Ag, Mn, Fe As, Ba, Cr, Bi, Mg and K (Appendix 5a and 5b). In contrast sample 7158 shows minor enrichment in Zn, Ag, Fe, V and B. Notably, the sample with the highest Fe concentration, is 7159, occurs above unit ONFft, that hosts the iron formation. On the northern side of the fold, sample 7154 exhibits a very weak increase in Zn, Cd, V and B. The samples showing weak enrichment on this line are believed to be mainly related to different lithology and not buried mineralization.

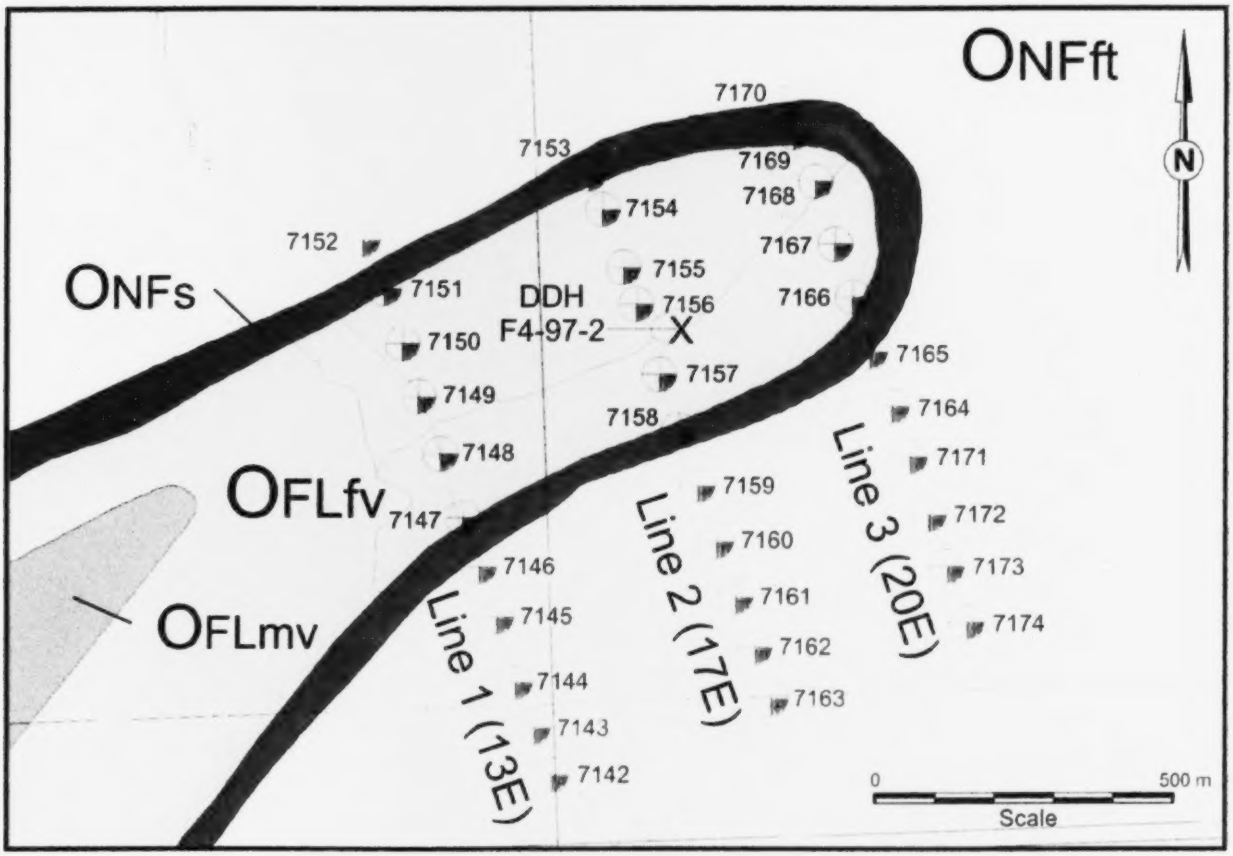
### 6.8.5 Line 2 Conventional Results (Figure 9)

The conventional geochemical data does not show any areas with significant enrichment except for possibly sample 7160 where there is a slight increase in As (Appendices 7c and 8c) and Sb. In contrast, the QPX data show elevated Cu, Pb, Zn, Ag, As and Bi at sample 7158 and sample 7159 (Appendix 8c). These samples are over or adjacent to unit ONFs that hosts the Camel Back South Prospect.

### 6.8.6 Line 3 QPX Results

This line, like Line 1 and Line 2, has no conspicuous QPX soil anomalies. It appears that most elements are slightly enriched along the whole line (Appendix 5b). This may reflect the greater fracturing found at the nose of the fold and hence more leakage from widespread disseminated mineralization. A wide zone from sample 7166 to 7172 shows slight enrichment in K, Fe and Al suggesting that there may be a widespread alteration halo in this area. The lack of enrichment in base metal and pathfinder elements seems to indicate that the iron formation is barren in base metal sulphides at this location.

Samples 7164 and 7165 are enriched in Pb. Sample 7164 is also slightly anomalous in Zn and Bi and shows elevated Fe and As. Sample 7165 is enriched in Pb and to a much lesser degree in Cr, Mg and Ba. Only samples 7164 and 7168 show any significant increase in S. Sample 7168 is located about 100 m to the west and in the down dip direction from DDH F4-97-2 (Figure 9).


ONFft
N
7170
7153
7169
7168
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7155
ONFs
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DDH
F4-97-2
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7166
X
7150
7165
7157
7149
7158
7164
7148
7171
OFLfv
7147
7159
7172
7160
Line 3 (20E)
7146
Line 2 (17E)
7173
7161
7145
7174
OFLmv
7162
Line 1 (13E)
7144
7163
7143
7142
0
500 m
Scale

Figure 9. Close-up of location of QPX B-horizon soil sample sites with sample site numbers in the vicinity of the Camel Back massive sulphide deposit. Sample site numbers in 7000 series are prefixed by MP02 in Appendix 5a. OFLmv = Flat Landing Brook Formation mafic volcanic rocks. For the rest of the bedrock geology see legend on Plate 2003-7A. Bedrock geology after van Staal et al. 2002.

### 6.8.7 Line 3 Conventional Results (Figure 9)

One sample that stands out on this line is sample 7168, which has elevated Zn (Appendices 7c, 8c and 8f) in both the conventional and QPX data sets. This anomaly is near a DDH (F4-97-2) that intersected the iron formation. There are no other samples on this line that show enrichment in conventional analysis, except for 7172 where there is elevated Cu, Pb, (Zn) Ag, Cd, Sb and Bi (Appendices 7c and 8c). The QPX data for this sample also shows a modest increase in the elements Cu, Pb, (Zn), As, Sb and Bi. Sample 7164 is also worth noting in that it exhibits some enrichment in conventional (Cu) and As. The QPX data indicate that this sample is in an area with elevated Pb Ag, As and Bi (12 ppm, the highest concentration found on this grid).

## 7.0 Taylor Brook Road QPVX Survey

### 7.1 Introduction and QPVX Bark Sampling Methodology

DSET Inc. carried out a vegetation (bark) sampling (QPVX) survey along the Taylor Brook Road (Figures 10 and 11) in September, 2002. The bark sampling traverse crossed one or more conductors located under Carboniferous cover rocks, which were identified by a geophysical airborne survey flown for Noranda Mining and Exploration Bathurst, NB (unpublished report). The area was flown because the very prospective Ordovician volcanic/sedimentary rocks are known to extended underneath the gently east dipping Carboniferous sedimentary cover. The QPVX bark survey was done to determine if this technique could detect base metal anomalies over the blind conductors situated beneath the barren Carboniferous sedimentary rocks.

A hatchet was used to scrap off the outer bark of mainly black spruce but also included samples from pine and maple trees. The bark from at least five trees was sampled over a distance of 100 m, giving an almost continuous sample. This sampling procedure was used to increase the chances of collecting a sample directly over the conductor(s) and over blind mineralization. The sample points shown in Figure 11 are plotted at the mid-point of the sample interval.

About 500-750 g of bark were collected and placed in clear plastic bags. The bark samples were dried at an ambient temperature of 20°C and then ground in a food blender and homogenized. A 25 g subsample was then weighed out into a quartz beaker (250 ml) and placed in a muffle furnace. The sample was ashed by slowly ramping the temperature up to 550°C. The ashing took approximately 24 hours to complete. All the ash was then transferred to a test tube, capped and boxed for shipment to Acme Laboratories Ltd, Vancouver, BC. Each ash sample was digested in hot Aqua Regia and then diluted and analyzed by ICP-MS for 37 elements.

## 7.2 QPVX Results

### 7.2.1 Copper (Cu)

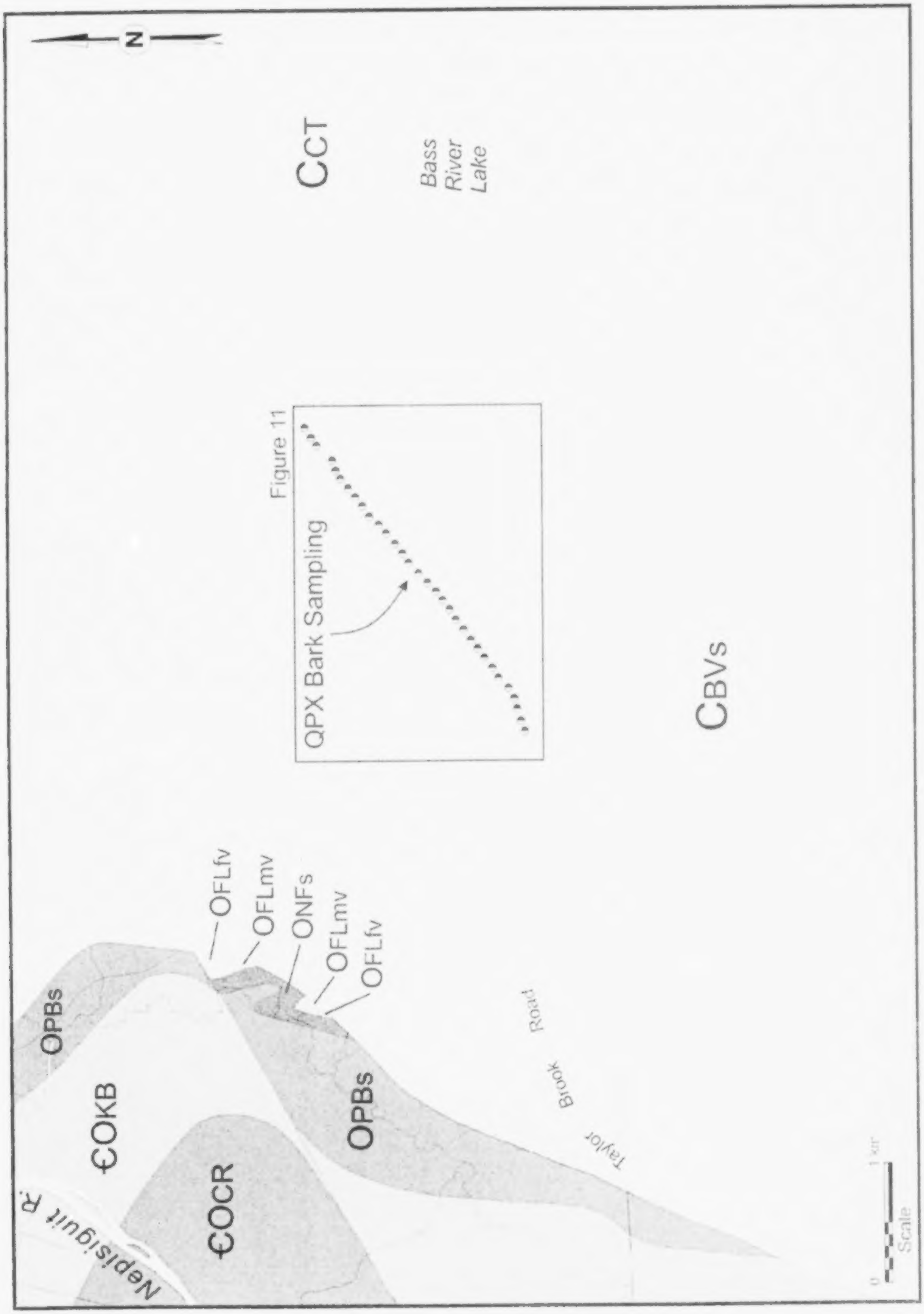
There are only two samples with elevated Cu values, sample 7185 (451 ppm) and sample 7204 (331 ppm). Sample 7185 does not have any coincident Pb, Zn, Ag or any other pathfinder elements. However, 7204 is flanked to the east by elevated Pb and Zn in sample 7205 (Appendix 6b). The complete data set is found in Appendix 6a.

### 7.2.2 Lead (Pb)

The highest Pb concentration (2530 ppm) is found in sample 7195 (Appendix 6b). It has coincident elevated concentrations of Zn and Ag. It also has elevated concentrations of Fe (4.38 %), As, Bi (8.34 ppm) and Au (445 ppb). The concentration profiles for Ag, Au and Ba are shown in Appendix 6b. This is considered to be the best anomaly and has the best chance to indicate buried massive sulphide mineralization.

Other more modest Pb anomalies are found at sample 7176, which has elevated concentrations of Zn, Ag, Mn, As, Fe and Bi and at samples 7199 and 7200, where modest Pb values are coincident with modest Zn, Ag Bi, B and Fe values. Another area of Pb enrichment is found at samples 7181 and 7182,

Figure 10 (over). Location of QPX bark sample sites over Carboniferous sedimentary rocks in the eastern Bathurst Mining Camp. ЄOCR = Chain of Rocks Formation sedimentary rocks; OFLmv = Flat Landing Brook Formation mafic volcanic rocks; CCT = Clifton Formation sedimentary rocks. For the rest of the bedrock geology see legend on Plate 2003-7A. Bedrock geology after van Staal et al. 2002.


N
OPBs
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€OCR
Nepisiguit R.
OPBs
OFLfv
OFLmv
ONFs
OFLmv
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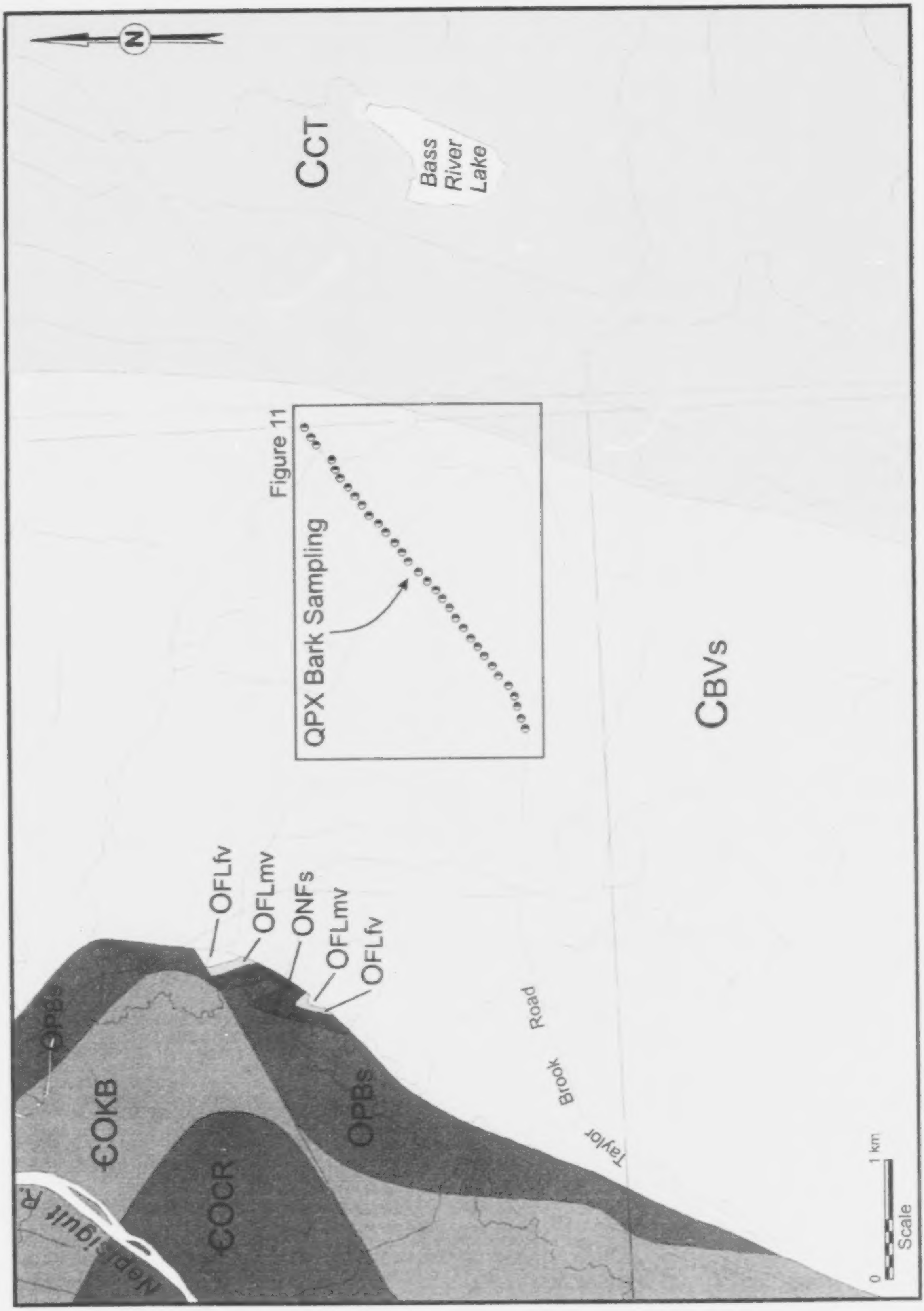
Taylor Brook Road
QPX Bark Sampling
Figure 11
CBVs
CCT
Bass River Lake
0
1 km
Scale


N
CCT
Bass
River
Lake
Figure 11
QPX Bark Sampling
CBVs
OFLfv
OFLmv
ONFs
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OPBs
ЄOKB
ЄOCR
OPBs
Nepisiguit R.
Taylor
Brook
Road
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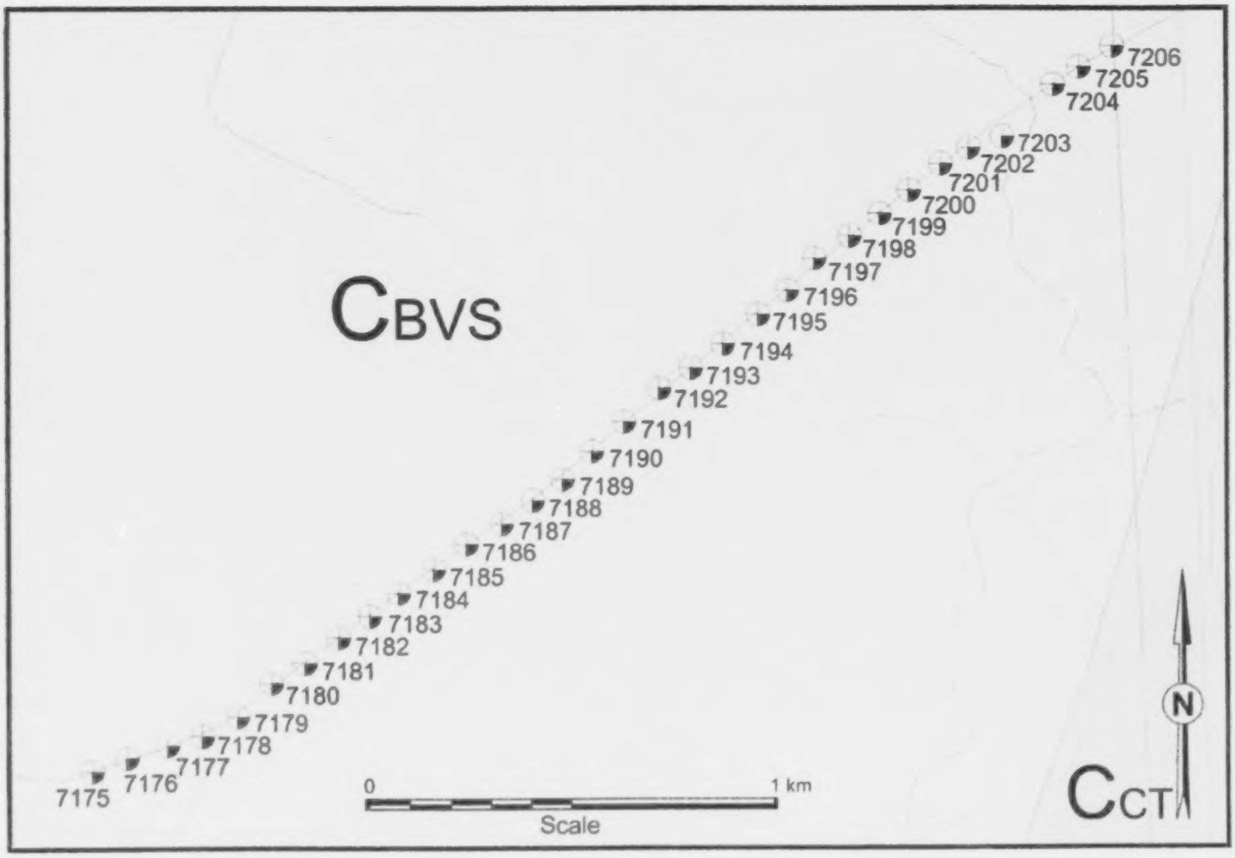
1 km
Scale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7184
7183
7182
7181
7180
7179
7178
7177
7176
7175
CBVS
CCT
N
0
1 km
Scale

Figure 11. Close-up of location of QPX bark sample sites with sample site numbers over Carboniferous sedimentary rocks in the eastern Bathurst Mining Camp. Sample site numbers in 7000 series are prefixed by MP02 in Appendix 6a. CCT = Clifton Formation sedimentary rocks. For the rest of the bedrock geology see legend on Plate 2003-7A. Bedrock geology after van Staal et al. 2002.

which are flanked by a high Zn concentration 100 m to the west. Sample 7182 has the highest concentration of Au (855 ppb) of any sample and shows coincident enrichment in Bi and Cd. Sample 7205 has a slightly elevated Pb concentration (1283 ppm) and is coincident with elevated concentrations of Zn, Bi, Cu and Au.

### 7.2.3 Zinc (Zn)

The element Zn is already covered in Section 7.2.2 because of its common association with lead.

### 7.2.4 Discussion

If the sum of the base metals Cu+Pb+Zn (Appendix 6b) are considered then sample 7195 stands out with a product value of 6610. Its strength and association with Fe and pathfinder elements such as Ag, As, Au and Bi make this a prime target for further geophysical surveys and/or testing by diamond drilling program. There are other more modest base metal anomalies that are located at samples 7180, 7181, 7199 and 7205.

## 8.0 Discussion and Conclusions

Transect Lines 5000 and 6000 (2001) crossed over very prospective geology that included areas previously explored by drilling. Some zones of enrichment are coincident with areas that were drilled but there are also anomalies that do not appear to have been tested by drilling and/or trenching. Targets that exhibit base metal QPX enrichment should have fill-in sampling done with a 50 m sample spacing and include at least one line on either side. In general, if the reconnaissance QPX anomalies are to be properly evaluated, a deep penetrating geophysical EM or IP survey system must also be done. Also since the odds of finding another large VMS deposit are believed to be the highest near known deposits test lines should be sampled near the mined out deposits.

The QPX Cu+Pb+Zn sum bar chart (Plate 2003-7B) shows three clear zones of base metal enrichment on Transect 5000. One anomaly is located directly over the area that was drilled by Eastmain Resources Inc. An exploration drill hole intersected a narrow zone of high-grade sphalerite in this area. Another anomaly of equal magnitude is located at about the middle of Transect 5000. Exploration trenches are found along strike about 1 km to the south and diamond drill holes (Captain Deposit) exist about 1.5 km to the north. The third area of enrichment occurs at the eastern end of Transect 5000 over rocks of the Nepisiguit Falls Formation (unit ONFft and ONFs). Diamond drill hole TB-93-1 is collared about 100 m to the north of this area (Figure 2). The CdxSbxAs product profile chart identifies the first two base metal enriched zones to have a much higher pathfinder element concentration so they would have the highest rating.

On Transect 6000 the best base metal anomaly (Cu+Pb+Zn) is located at sample 6052 and 6053 and has a strong coincident AsxCdxSbxBi association. This zone is about 200 m east and down dip from at least four diamond drill holes and a trench. There are several good base metal anomalies to the west of 6053, especially at samples 6077 to 6092, 6105, 6101 and 6118. All have coincident enrichment in AsxCdxSbxBi. All these geochemical QPX anomalies are in an area with very little previous exploration work. To the east of sample 6052 are some areas of base metal enrichment with sums of 500 or higher. They also have relatively high concentrations of pathfinder elements. The ones that stand out are samples 6015 and 6024. The anomaly at sample 6024 is located just to the north of a group of drill holes (20-8, 20-9, K-5 and K-6) (Figure 2).

The samples with the strongest Zn and pathfinder element product anomalies are 6040 and to a much lesser degree sample 6001. Seven hundred meters to the west sample 6032 also has an elevated Zn and pathfinder element anomaly. This anomaly is on the west limb of a syncline at about the same stratigraphic position as sample 6040. Both anomalies are coincident with a strong EM response.

A QPVX vegetation (bark) survey was conducted just to the southeast of the Key Anacon massive sulphide deposit along the Taylor Brook Road. This survey was designed to test airborne EM anomalies that were detected in prospective Ordovician volcanic rocks that lie beneath about 100 m of Carboniferous sedimentary rocks. The QPVX survey detected several base metal anomalies on the survey line. The present and future development of geochemical and geophysical methods for detecting hidden VMS deposits buried under such of barren cover will greatly assist the private companies, prospectors and government geologists in locating new deposits.

Four detailed QPX and conventional soil surveys were done in 2002. Two small three-line grids were sampled to evaluate two Zn anomalies found on Transect 6000. Two others were located in the Mount

Fronsac area, where three magnetic anomalies were tested and the Camel Back area, where a known exhalative horizon hosts two nearby VMS deposits was tested.

The two detailed grids along Transect 6000, called Railroad 1 and Railroad 2, were sampled in the vicinity of samples 6040 and 6032. On Railroad 1, two multi-element anomalies (with high Zn and As concentrations) were identified and labeled Zone A and B. One multi-element soil anomaly on Line 8, the Zone C (samples 7084 to 7086), was identified on the Railroad 2 (6032) grid. Drill hole K-7, located about 80 m south of this Cu, Pb, Zn and Ag (As, Cd, Sb and Bi) anomaly, intersected about 130 m of "phyllite" so this anomaly remains unexplained.

In the Mount Fronsac area, two anomalies were identified on Line 1 by samples 7104, 7105, 7110 and 7114. The zones show some base metal and As enrichment. The first anomaly, which occurs on the west flank of the magnetic target, is unusual because the Pb concentration is higher than the Zn concentration. The association with Zn, As, Sb and Bi makes this a target for further detailed geochemical and deep penetrating EM and/or IP surveys. A zone of Pb enrichment plus other base metals along with Ag and As and other pathfinder elements is found directly above the magnetic anomaly on Line 2. The CuxPbxZn product anomaly is given the highest rating. The third magnetic feature, on Line 3, did not have any significant base metal anomaly associated with it.

In the Camel Back area, no conspicuous QPX soil anomalies were identified. The tight folding and geology seemed to control several low-level anomalies that are associated with unit ONFS formation that hosts the Camel Back and Camel Back South deposits.

The QPVX vegetation bark sampling survey along the Taylor Brook Road identified a very good Pb plus Zn, Cu, As, Fe and Bi anomaly at sample 7195. This anomaly should be tested by at least one drill hole.

The conventional geochemical soil results, on average, show lower anomaly to background ratios than the QPX results and have a lower concentration in absolute terms. In some places, like Zone B at the Railroad 1 grid, the conventional survey clearly identified the Zone B Zn rich zone with a good anomaly to background ratio. It is important to consider this information in conjunction with previous drill results and geophysical data for this area. For both the QPX and conventional geochemical surveys it is important to establish what the local background concentrations are and base any interpretation on this information. Conventional geochemical data may also detect subtle geochemical anomalies but because the analysis is not done on a mobile metal ion concentrate, which emanates from a buried deposit, the contrast with background values will normally be very small. No evidence of significant transported conventional or QPX anomalies were detected in the glaciated terrain. Swampy and in general wet ground prevents the formation of a good B-horizon soil that is required to get the best results for conventional and QPX methods. In these areas vegetation bark sampling should be considered.

## 9.0 Recommendations

1) In light of the geochemical QPX results from Transects 5000 and 6000 and the detailed soil surveys completed at Mount Fronsac and Camel Back, more QPX surveys should be planned for the Bathurst Mining Camp.

2) The anomalies from the QPVX vegetation data should be tested by diamond drilling to determine if this technique can be used for screening deeply buried EM/Mag anomalies located under the Carboniferous cover.

## 10.0 Acknowledgments

Larry Petrie and John Langton provided useful discussion and data on the geophysics and bedrock geology of the study area. Deep Search Exploration Technologies would like to acknowledge the financial support provided through a Value Added and Mineral Processing (VAMP) grant and A-base funding, by the New Brunswick Department of Natural Resources. Seela Lahti assisted the authors with the field work. Philippe Arseneau assisted with the production of the final report and Philip Evans, Terry Leonard and Diane Richard drafted the maps and figures. Barb Carroll edited the report and maps.

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Appendix 1. QPX B-horizon soil geochemistry, Transect 5000, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

| SAMPLEID | Order | Geology | Mo Q | Cu Q | Pb Q | Zn Q | Ag Q | Ni Q | Co Q | Mn Q | Fe Q | As Q | U Q | Au Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | NW to SE | | 0.01 | 0.01 | 0.01 | 0.10 | 2.00 | 0.10 | 0.10 | 1.00 | 0.01 | 0.10 | 0.10 | 0.20 |
| Unit | | | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | pct | ppm | ppm | ppb |
| MP015006 | 1 | OFLfv | 0.65 | 3.42 | 18.06 | 42.09 | 58.56 | 10.61 | 4.64 | 154.94 | 4.01 | 1.10 | 0.49 | 2.07 |
| MP015005 | 2 | OFLfv | 2.47 | 49.63 | 75.26 | 204.97 | 230.84 | 52.93 | 37.41 | 1094.50 | 15.56 | 35.82 | 2.39 | 9.15 |
| MP015004 | 3 | OFLfv | 2.39 | 29.01 | 52.86 | 88.83 | 79.75 | 30.80 | 20.08 | 594.00 | 9.82 | 15.40 | 1.65 | 5.78 |
| MP015003 | 4 | OFLfv | 1.08 | 20.15 | 33.86 | 77.74 | 184.00 | 35.19 | 14.03 | 531.30 | 7.04 | 23.69 | 1.38 | 6.21 |
| MP015002 | 5 | OFLfv | 4.48 | 57.67 | 113.32 | 234.22 | 224.17 | 51.79 | 24.74 | 1352.75 | 31.07 | 98.17 | 3.87 | 27.83 |
| MP015001 | 6 | OFLfv | 7.50 | 77.53 | 157.81 | 328.51 | 162.84 | 86.38 | 38.94 | 1508.04 | 28.53 | 86.38 | 5.66 | 48.14 |
| MP015007 | 7 | OFLfv | 7.34 | 95.04 | 113.04 | 360.00 | 187.20 | 109.44 | 48.24 | 1728.00 | 27.65 | 101.52 | 5.76 | 19.44 |
| MP015008 | 8 | Omi | 0.70 | 2.65 | 15.04 | 123.10 | 15.00 | 3.80 | 1.80 | 156.00 | 1.05 | 7.70 | 0.20 | 1.40 |
| MP015009 | 9 | OFLfv | 4.03 | 37.85 | 98.16 | 332.17 | 184.26 | 34.36 | 15.44 | 1454.16 | 12.35 | 84.16 | 2.99 | 4.98 |
| MP015010 | 10 | Omi | 7.38 | 66.82 | 166.21 | 918.38 | 457.92 | 90.74 | 40.70 | 1416.16 | 26.12 | 155.18 | 4.24 | 11.02 |
| MP015011 | 11 | OFLfv | 10.64 | 69.29 | 97.16 | 287.99 | 136.84 | 77.13 | 34.21 | 1256.44 | 20.03 | 80.86 | 3.11 | 11.20 |
| MP015012 | 12 | OFLfv | 11.24 | 87.50 | 209.79 | 716.00 | 279.24 | 71.60 | 43.68 | 1646.80 | 31.93 | 193.32 | 5.73 | 2.86 |
| MP015013 | 13 | Omi | 17.37 | 103.67 | 140.05 | 348.17 | 192.24 | 75.47 | 53.40 | 1495.20 | 26.27 | 125.31 | 5.70 | 13.53 |
| MP015014 | 14 | OFLfv | 8.82 | 89.01 | 101.19 | 468.75 | 131.22 | 85.29 | 45.20 | 1523.61 | 26.88 | 99.87 | 5.10 | 17.50 |
| MP015015 | 15 | OFLfv | 4.05 | 28.27 | 75.54 | 93.28 | 116.16 | 25.70 | 14.78 | 535.04 | 14.64 | 37.66 | 2.82 | 2.46 |
| MP015016 | 16 | OFLfv | 171.20 | 36.76 | 270.67 | 988.02 | 349.80 | 29.70 | 636.90 | 264066.00 | 93.48 | 1524.60 | 4.62 | 15.18 |
| MP015017 | 17 | ONFft | 95.06 | 50.63 | 401.53 | 283.90 | 253.84 | 28.72 | 283.23 | 30327.20 | 45.09 | 1890.44 | 4.68 | 26.05 |
| MP015018 | 18 | ONFft | 8.07 | 73.62 | 159.93 | 244.24 | 463.32 | 53.77 | 35.46 | 1252.68 | 24.20 | 160.73 | 5.72 | 3.43 |
| MP015019 | 19 | OFLfv | 4.84 | 57.48 | 158.45 | 459.20 | 695.75 | 54.45 | 46.59 | 2704.35 | 20.57 | 106.48 | 3.63 | 6.66 |
| MP015020 | 20 | OFLfv | 6.82 | 52.55 | 111.61 | 188.44 | 130.22 | 44.43 | 21.45 | 1026.44 | 26.12 | 119.50 | 4.60 | 23.75 |
| MP015021 | 21 | OFLfv | 4.65 | 50.98 | 144.15 | 207.25 | 892.84 | 32.72 | 17.78 | 610.04 | 15.68 | 85.65 | 4.44 | 5.66 |
| MP015022 | 22 | OFLfv | 2.34 | 28.35 | 88.67 | 129.01 | 231.30 | 22.87 | 12.34 | 578.25 | 8.94 | 62.71 | 2.83 | 6.43 |
| MP015023 | 23 | OFLfv | 3.17 | 25.70 | 125.33 | 126.24 | 132.88 | 22.65 | 9.97 | 416.76 | 9.33 | 45.00 | 3.02 | 5.44 |
| MP015024 | 24 | OFLfv | 2.71 | 25.81 | 64.38 | 106.92 | 141.90 | 18.81 | 9.57 | 303.60 | 9.11 | 45.87 | 2.64 | 3.63 |
| MP015025 | 25 | ONFft | 3.33 | 27.52 | 55.47 | 121.97 | 272.16 | 29.23 | 12.10 | 453.60 | 11.66 | 46.70 | 3.02 | 3.36 |
| MP015026 | 26 | ONFft | 2.58 | 23.53 | 95.20 | 146.03 | 144.48 | 17.03 | 13.42 | 933.96 | 17.34 | 98.04 | 4.64 | 9.29 |
| MP015027 | 27 | ONFft | 1.82 | 25.81 | 47.04 | 116.43 | 64.01 | 16.61 | 9.34 | 429.04 | 5.45 | 46.02 | 2.25 | 2.08 |
| MP015028 | 28 | ONFft | 3.76 | 32.25 | 101.99 | 352.34 | 510.92 | 25.06 | 13.98 | 1060.40 | 14.94 | 95.92 | 4.34 | 3.86 |
| MP015029 | 29 | ONFft | 8.37 | 37.43 | 195.19 | 375.54 | 334.68 | 46.64 | 28.11 | 1106.30 | 25.95 | 207.51 | 6.58 | 3.59 |
| MP015030 | 30 | ONFft | 4.83 | 44.02 | 124.81 | 167.08 | 409.31 | 26.17 | 13.42 | 650.87 | 15.84 | 153.66 | 4.70 | 13.42 |
| MP015031 | 31 | ONFft | 0.45 | 15.50 | 60.65 | 152.04 | 285.60 | 10.08 | 0.80 | 50.00 | 8.57 | 52.50 | 0.90 | 63.00 |
| MP015092 | 32 | ONFft | 2.94 | 43.07 | 314.80 | 332.20 | 271.80 | 41.68 | 7.14 | 352.80 | 15.76 | 173.35 | 2.10 | 38.05 |
| MP015093 | 33 | ONFft | 15.10 | 12.45 | 52.70 | 93.87 | 149.60 | 14.96 | 38.66 | 1177.80 | 7.14 | 54.23 | 8.46 | 13.46 |
| MP015094 | 34 | ONFs | 8.00 | 48.96 | 74.39 | 311.33 | 310.20 | 54.14 | 8.60 | 403.92 | 20.98 | 84.60 | 1.50 | 6.20 |
| MP015095 | 35 | ONFs | 8.63 | 20.18 | 36.85 | 120.99 | 218.90 | 14.73 | 24.25 | 919.32 | 13.97 | 37.81 | 3.95 | 2.39 |
| MP015096 | 36 | OFLfv | 3.70 | 26.78 | 47.22 | 191.58 | 127.72 | 36.67 | 7.96 | 358.20 | 13.27 | 31.31 | 2.39 | 7.83 |
| MP015097 | 37 | OFLfv | 2.93 | 5.58 | 6.80 | 48.40 | 21.00 | 9.50 | 14.42 | 609.76 | 2.53 | 3.70 | 4.12 | 2.70 |
| MP015098 | 38 | OFLfv | 0.44 | 16.82 | 65.46 | 281.28 | 87.90 | 17.58 | 4.60 | 277.00 | 13.54 | 25.20 | 1.00 | 4.10 |
| MP015099 | 39 | OFLfv | 4.34 | 2.88 | 10.20 | 21.70 | 3.00 | 3.60 | 17.58 | 11895.80 | 0.85 | 10.30 | 2.93 | 0.90 |
| MP015100 | 40 | OFLfv | 1.38 | 9.31 | 15.77 | 36.80 | 18.40 | 5.70 | 1.50 | 86.00 | 5.89 | 17.48 | 0.30 | 4.23 |
| MP015101 | 41 | OCNEfi | 1.62 | 51.91 | 65.11 | 113.52 | 171.60 | 17.82 | 6.07 | 114.08 | 11.78 | 72.93 | 0.74 | 11.55 |
| MP015102 | 42 | OCNEfi | 3.10 | 4.35 | 23.12 | 12.30 | 50.00 | 1.70 | 9.90 | 320.10 | 1.23 | 12.00 | 4.62 | 0.40 |
| MP015032 | 43 | ONFs | 16.07 | 72.55 | 190.04 | 868.52 | 176.28 | 91.53 | 187.81 | 17417.82 | 17.15 | 608.84 | 10.85 | 12.88 |
| MP015033 | 44 | ONFs | 3.24 | 36.27 | 67.60 | 367.28 | 99.60 | 37.35 | 23.66 | 1626.80 | 13.07 | 56.44 | 3.74 | 7.47 |
| MP015034 | 45 | ONFs | 6.15 | 61.66 | 81.90 | 442.22 | 407.48 | 56.78 | 30.73 | 1923.84 | 22.24 | 115.56 | 5.34 | 12.02 |
| MP015035 | 46 | ONFft | 12.34 | 85.73 | 149.01 | 351.83 | 358.20 | 50.94 | 23.88 | 1138.28 | 46.49 | 271.44 | 5.57 | 9.55 |
| MP015036 | 47 | ONFft | 90.40 | 130.95 | 260.60 | 831.71 | 741.37 | 114.01 | 175.06 | 15961.26 | 32.08 | 2131.28 | 26.79 | 3.12 |
| MP015037 | 48 | ONFft | 24.23 | 53.00 | 90.69 | 284.75 | 183.00 | 32.21 | 19.76 | 893.04 | 23.64 | 354.29 | 3.66 | 34.40 |
| MP015038 | 49 | ONFft | 6.37 | 130.15 | 136.59 | 756.89 | 329.40 | 84.18 | 40.26 | 2291.16 | 28.62 | 235.70 | 6.59 | 8.05 |
| MP015039 | 50 | OFLfv | 22.17 | 62.12 | 119.65 | 492.80 | 141.96 | 68.95 | 59.49 | 11052.60 | 16.76 | 295.41 | 7.44 | 18.93 |
| MP015040 | 51 | OFLfv | 15.84 | 106.08 | 236.38 | 1386.11 | 133.28 | 201.49 | 86.24 | 5017.60 | 21.25 | 393.57 | 10.19 | 10.98 |
| MP015041 | 52 | OFLfv | 4.87 | 62.78 | 125.00 | 535.92 | 222.72 | 100.92 | 48.02 | 2296.80 | 24.08 | 125.98 | 4.87 | 125.28 |
| MP015042 | 53 | OLRBM | 1.80 | 27.87 | 54.17 | 175.45 | 110.20 | 32.77 | 20.88 | 1725.50 | 8.03 | 121.22 | 1.74 | 13.05 |
| MP015043 | 54 | OLRBM | 8.20 | 62.12 | 117.95 | 281.42 | 1968.00 | 61.66 | 34.77 | 1567.84 | 33.78 | 292.58 | 5.25 | 3.94 |
| MP015044 | 55 | OLRBM | 6.56 | 54.90 | 125.82 | 469.38 | 523.27 | 63.26 | 27.34 | 1077.78 | 22.49 | 146.05 | 4.69 | 16.40 |
| MP015045 | 56 | OLRs | 6.27 | 60.44 | 110.46 | 177.49 | 599.30 | 62.24 | 30.43 | 898.95 | 17.93 | 175.18 | 3.69 | 10.14 |
| MP015046 | 57 | OLRs | 13.43 | 18.84 | 58.67 | 204.58 | 92.64 | 63.30 | 42.46 | 2107.56 | 14.98 | 156.72 | 3.86 | 10.04 |
| MP015047 | 58 | OTMs | 16.74 | 111.04 | 67.12 | 410.80 | 836.91 | 159.72 | 114.32 | 10600.86 | 20.51 | 228.10 | 10.39 | 2.19 |
| MP015048 | 59 | OTMs | 0.60 | 6.11 | 9.42 | 35.30 | 21.00 | 8.40 | 3.40 | 116.00 | 2.45 | 19.80 | 0.70 | 1.10 |
| MP015049 | 60 | OTMs | 1.15 | 11.48 | 18.71 | 33.70 | 61.00 | 19.60 | 20.00 | 446.00 | 2.34 | 157.70 | 1.10 | 0.90 |
| MP015050 | 61 | OTMs | 0.88 | 5.18 | 9.97 | 35.70 | 38.00 | 8.40 | 5.60 | 191.00 | 2.32 | 50.40 | 0.90 | 0.90 |
| MP015051 | 62 | OTMs | 0.50 | 7.99 | 9.69 | 26.40 | 73.00 | 11.00 | 3.10 | 132.00 | 2.51 | 8.20 | 0.90 | 0.40 |
| MP015052 | 63 | OTMs | 0.79 | 10.09 | 17.51 | 17.80 | 60.00 | 4.00 | 1.50 | 56.00 | 4.61 | 10.40 | 2.70 | 0.50 |
| MP015053 | 64 | OTMs | 6.36 | 108.76 | 88.77 | 345.31 | 461.34 | 132.11 | 51.03 | 1789.44 | 29.22 | 184.54 | 4.19 | 4.89 |
| MP015054 | 65 | OTMs | 1.12 | 16.71 | 20.22 | 120.15 | 188.68 | 27.23 | 12.82 | 516.20 | 5.13 | 18.16 | 2.49 | 0.71 |
| MP015055 | 66 | OTMs | 0.35 | 3.32 | 9.32 | 222.30 | 23.00 | 5.40 | 2.10 | 130.00 | 2.35 | 2.70 | 1.30 | 1.70 |
| MP015056 | 67 | OTMs | 0.07 | 0.65 | 1.66 | 8.60 | 1.00 | 1.60 | 1.10 | 84.00 | 0.42 | 0.60 | 0.30 | 0.80 |
| MP015057 | 68 | OTMs | 0.43 | 2.36 | 10.98 | 17.00 | 18.00 | 3.30 | 1.80 | 88.00 | 3.80 | 2.20 | 2.40 | 1.40 |
| MP015058 | 69 | OLRs | 0.50 | 2.95 | 10.94 | 20.80 | 15.00 | 4.60 | 2.20 | 104.00 | 3.35 | 2.50 | 2.30 | 0.70 |
| MP015059 | 70 | OLRs | 0.10 | 1.12 | 2.51 | 12.70 | 3.00 | 2.30 | 1.80 | 119.00 | 0.67 | 0.90 | 0.60 | 0.70 |

## Appendix 1. QPX B-horizon soil geochemistry, Transect 5000, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

| SAMPLEID | Order | Geology | Mo Q | Cu Q | Pb Q | Zn Q | Ag Q | Ni Q | Co Q | Mn Q | Fe Q | As Q | U Q | Au Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | NW to SE | | 0.01 | 0.01 | 0.01 | 0.10 | 2.00 | 0.10 | 0.10 | 1.00 | 0.01 | 0.10 | 0.10 | 0.20 |
| Unit | | | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | pct | ppm | ppm | ppb |
| MP015060 | 71 | ONFft | 2.63 | 22.43 | 76.95 | 131.21 | 349.58 | 40.86 | 14.07 | 626.52 | 18.34 | 20.43 | 6.36 | 1.82 |
| MP015061 | 72 | ONFft | 2.45 | 35.25 | 64.22 | 215.83 | 1011.84 | 61.61 | 33.05 | 1399.44 | 14.12 | 33.86 | 6.53 | 4.08 |
| MP015062 | 73 | ONFft | 1.31 | 22.12 | 35.66 | 205.57 | 286.72 | 40.45 | 15.10 | 627.20 | 6.84 | 44.03 | 2.82 | 1.02 |
| MP015063 | 74 | ONFft | 0.50 | 8.04 | 15.14 | 49.24 | 285.12 | 12.28 | 3.70 | 167.64 | 3.62 | 10.03 | 0.79 | 1.58 |
| MP015064 | 75 | ONFft | 3.63 | 62.76 | 93.07 | 350.11 | 477.12 | 117.60 | 35.62 | 1659.84 | 21.03 | 73.25 | 7.39 | 4.70 |
| MP015065 | 76 | ONFft | 0.17 | 3.10 | 6.23 | 18.50 | 74.00 | 4.90 | 1.40 | 76.00 | 0.99 | 3.00 | 0.30 | 0.60 |
| MP015066 | 77 | ONFft | 4.42 | 95.12 | 91.25 | 446.35 | 521.40 | 153.26 | 61.62 | 4179.10 | 22.59 | 88.48 | 8.69 | 16.59 |
| MP015067 | 78 | ONFft | 1.30 | 28.13 | 32.28 | 141.66 | 164.64 | 44.25 | 15.09 | 720.30 | 7.03 | 21.61 | 2.06 | 4.12 |
| MP015068 | 79 | ONFft | 0.54 | 5.97 | 19.75 | 26.60 | 88.00 | 7.10 | 3.50 | 142.00 | 2.29 | 9.70 | 0.90 | 1.80 |
| MP015069 | 80 | ONFft | 3.37 | 49.55 | 127.01 | 369.36 | 267.84 | 38.88 | 22.03 | 777.60 | 13.74 | 294.62 | 6.05 | 3.46 |
| MP015070 | 81 | ONFft | 2.22 | 38.55 | 40.96 | 78.91 | 156.18 | 18.36 | 8.22 | 276.74 | 9.59 | 34.25 | 1.92 | 3.29 |
| MP015071 | 82 | ONFft | 2.07 | 23.50 | 74.12 | 107.42 | 322.26 | 18.08 | 8.38 | 298.68 | 7.23 | 50.83 | 2.10 | 12.05 |
| MP015072 | 83 | ONFft | 2.23 | 33.56 | 139.83 | 169.21 | 269.04 | 33.28 | 14.16 | 605.34 | 7.65 | 52.39 | 2.48 | 41.06 |
| MP015073 | 84 | ONFft | 1.32 | 17.27 | 29.69 | 207.52 | 530.86 | 27.18 | 17.02 | 688.34 | 7.54 | 11.43 | 2.29 | 5.33 |
| MP015074 | 85 | ONFft | 0.61 | 8.31 | 11.36 | 58.45 | 93.60 | 12.58 | 5.30 | 212.16 | 2.86 | 6.24 | 0.83 | 3.33 |
| MP015075 | 86 | ONFft | 1.02 | 10.27 | 26.83 | 191.10 | 278.32 | 12.94 | 8.62 | 950.60 | 6.17 | 8.04 | 1.76 | 7.64 |
| MP015076 | 87 | ONFft | 0.36 | 3.21 | 6.80 | 64.10 | 48.00 | 6.40 | 3.20 | 316.00 | 1.78 | 2.90 | 0.50 | 0.90 |
| MP015077 | 88 | OFLfv | 2.41 | 31.48 | 45.95 | 219.75 | 232.90 | 33.98 | 19.73 | 1394.66 | 9.18 | 30.14 | 2.47 | 0.27 |
| MP015078 | 89 | OLRBM | 8.58 | 156.88 | 75.77 | 312.09 | 1017.24 | 129.40 | 65.05 | 2255.92 | 21.73 | 105.18 | 4.15 | 8.30 |
| MP015079 | 90 | OLRBM | 1.06 | 15.31 | 22.99 | 64.25 | 152.88 | 25.12 | 7.28 | 262.08 | 5.10 | 12.92 | 1.09 | 3.64 |
| MP015080 | 91 | OLRBM | 2.60 | 58.83 | 76.88 | 299.88 | 336.60 | 121.64 | 48.20 | 1507.05 | 15.91 | 56.61 | 4.59 | 8.42 |
| MP015081 | 92 | OLRBM | 5.15 | 59.33 | 80.82 | 445.45 | 332.22 | 112.55 | 35.26 | 1396.68 | 19.46 | 62.38 | 4.75 | 6.10 |
| MP015082 | 93 | OLRBM | 3.16 | 40.72 | 62.32 | 198.53 | 214.32 | 69.94 | 26.51 | 1026.48 | 12.86 | 41.74 | 3.95 | 1.13 |
| MP015083 | 94 | ONFft | 9.60 | 90.72 | 110.48 | 421.60 | 488.00 | 136.80 | 74.40 | 1504.00 | 19.44 | 133.60 | 6.40 | 5.60 |
| MP015084 | 95 | ONFft | 9.35 | 115.52 | 300.20 | 468.92 | 896.80 | 69.16 | 48.64 | 1573.20 | 31.01 | 199.12 | 6.08 | 50.92 |
| MP015085 | 96 | ONFft | 6.32 | 113.60 | 162.35 | 407.91 | 1746.05 | 49.78 | 23.78 | 1084.78 | 26.01 | 175.35 | 6.69 | 48.30 |
| MP015086 | 97 | ONFft | 3.81 | 37.33 | 87.90 | 138.88 | 304.72 | 23.44 | 12.31 | 439.50 | 14.01 | 94.93 | 2.93 | 13.48 |
| MP015087 | 98 | ONFs | 4.00 | 53.34 | 88.08 | 148.35 | 283.04 | 34.16 | 18.06 | 580.72 | 12.69 | 82.96 | 3.42 | 11.22 |
| MP015088 | 99 | OLRs | 3.01 | 38.77 | 62.26 | 124.03 | 76.75 | 27.63 | 14.12 | 524.97 | 9.21 | 51.27 | 2.76 | 2.76 |
| MP015089 | 100 | OLRs | 1.26 | 13.26 | 30.01 | 57.02 | 118.68 | 17.29 | 6.97 | 219.30 | 7.82 | 19.35 | 1.55 | 6.45 |
| MP015090 | 101 | OLRs | 0.60 | 7.45 | 15.06 | 50.32 | 52.70 | 15.98 | 6.63 | 283.90 | 5.12 | 9.18 | 0.85 | 1.53 |
| MP015091 | 102 | OLRs | 2.25 | 21.97 | 43.94 | 151.55 | 114.18 | 29.76 | 14.19 | 705.84 | 9.86 | 51.90 | 2.42 | 6.23 |

## Appendix 1. QPX B-horizon soil geochemistry, Transect 5000, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

| SAMPLEID | Th Q | Sr Q | Cd Q | Sb Q | Bi Q | V Q | Ca Q | P Q | La Q | Cr Q | Mg Q | Ba Q | Ti Q | B Q | Al Q | Na Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.10 | 0.50 | 0.01 | 0.02 | 0.02 | 2.00 | 0.01 | 0.001 | 0.50 | 0.50 | 0.01 | 0.50 | 0.001 | 1.00 | 0.01 | 0.001 |
| Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | pct | ppm | ppm | pct | ppm | pct | ppm | pct | pct |
| MP015006 | 2.56 | 5.25 | 0.04 | 0.10 | 0.28 | 135.42 | 0.02 | 0.03 | 7.93 | 54.29 | 0.48 | 46.36 | 0.19 | 0.61 | 2.21 | 0.02 |
| MP015005 | 15.92 | 16.72 | 0.20 | 0.96 | 1.07 | 306.46 | 0.12 | 0.32 | 30.25 | 158.01 | 1.87 | 238.80 | 0.64 | 7.96 | 10.39 | 0.05 |
| MP015004 | 10.18 | 11.55 | 0.11 | 0.72 | 0.66 | 266.75 | 0.06 | 0.10 | 22.55 | 110.83 | 1.13 | 153.45 | 0.40 | 2.75 | 7.01 | 0.04 |
| MP015003 | 8.28 | 12.19 | 0.09 | 0.28 | 0.71 | 128.80 | 0.09 | 0.09 | 25.76 | 102.12 | 1.66 | 161.46 | 0.16 | 2.30 | 4.99 | 0.04 |
| MP015002 | 24.74 | 34.79 | 0.54 | 1.86 | 2.16 | 548.83 | 0.23 | 0.78 | 61.07 | 224.17 | 2.09 | 390.37 | 0.87 | 15.46 | 10.13 | 0.11 |
| MP015001 | 32.57 | 39.65 | 0.71 | 1.35 | 3.33 | 509.76 | 0.42 | 0.46 | 60.18 | 254.17 | 3.40 | 521.80 | 0.85 | 7.08 | 15.29 | 0.12 |
| MP015007 | 30.24 | 37.44 | 0.50 | 1.37 | 2.74 | 475.20 | 0.36 | 0.50 | 68.40 | 287.28 | 3.67 | 508.32 | 0.73 | 14.40 | 19.15 | 0.12 |
| MP015008 | 1.20 | 1.30 | 0.02 | 0.43 | 0.08 | 24.00 | 0.02 | 0.01 | 4.70 | 7.70 | 0.32 | 27.90 | 0.03 | 1.00 | 0.70 | 0.01 |
| MP015009 | 22.91 | 20.42 | 0.45 | 0.80 | 1.39 | 209.16 | 0.10 | 0.33 | 41.83 | 125.50 | 1.25 | 337.15 | 0.19 | 4.98 | 11.80 | 0.08 |
| MP015010 | 28.83 | 36.46 | 0.42 | 1.87 | 2.20 | 415.52 | 0.25 | 0.39 | 66.99 | 241.68 | 2.63 | 437.57 | 0.60 | 8.48 | 16.71 | 0.10 |
| MP015011 | 19.28 | 40.43 | 0.31 | 1.12 | 1.43 | 360.76 | 0.87 | 0.21 | 49.14 | 245.69 | 2.61 | 353.92 | 0.50 | 6.22 | 14.68 | 0.09 |
| MP015012 | 35.08 | 47.26 | 1.50 | 2.08 | 2.94 | 422.44 | 0.64 | 0.42 | 53.70 | 267.78 | 2.29 | 500.48 | 0.62 | 7.16 | 25.99 | 0.10 |
| MP015013 | 28.48 | 61.23 | 0.85 | 2.06 | 2.28 | 441.44 | 1.28 | 0.36 | 96.12 | 255.61 | 2.99 | 379.50 | 0.76 | 7.12 | 15.31 | 0.10 |
| MP015014 | 39.37 | 43.74 | 0.51 | 1.53 | 1.97 | 335.34 | 0.36 | 0.45 | 64.88 | 217.24 | 3.06 | 550.40 | 0.54 | 14.58 | 17.42 | 0.12 |
| MP015015 | 18.30 | 13.38 | 0.67 | 0.67 | 1.16 | 292.16 | 0.11 | 0.18 | 31.68 | 179.52 | 0.88 | 215.07 | 0.44 | 1.76 | 15.38 | 0.06 |
| MP015016 | 22.44 | 64.00 | 6.73 | 4.55 | 2.44 | 574.20 | 6.80 | 1.21 | 192.72 | 52.14 | 0.46 | 16838.58 | 0.09 | 13.20 | 4.29 | 0.04 |
| MP015017 | 13.36 | 28.06 | 0.47 | 5.01 | 8.02 | 2317.96 | 0.27 | 0.83 | 34.07 | 119.57 | 4.21 | 546.42 | 1.10 | 6.68 | 9.35 | 0.10 |
| MP015018 | 34.32 | 29.17 | 0.63 | 1.72 | 2.12 | 303.16 | 0.29 | 0.52 | 57.20 | 186.47 | 2.06 | 346.63 | 0.53 | 17.16 | 19.51 | 0.10 |
| MP015019 | 24.20 | 26.02 | 0.36 | 1.27 | 1.63 | 296.45 | 0.06 | 0.54 | 52.64 | 224.46 | 2.42 | 415.64 | 0.25 | 12.10 | 14.52 | 0.11 |
| MP015020 | 39.07 | 29.11 | 0.23 | 1.61 | 2.68 | 314.06 | 0.08 | 0.36 | 64.34 | 157.03 | 2.22 | 362.32 | 0.45 | 7.66 | 14.02 | 0.11 |
| MP015021 | 28.28 | 16.97 | 0.24 | 1.70 | 1.29 | 189.88 | 0.04 | 0.48 | 38.38 | 121.20 | 1.17 | 210.46 | 0.25 | 8.08 | 13.17 | 0.06 |
| MP015022 | 17.48 | 10.02 | 0.13 | 0.98 | 0.82 | 105.37 | 0.05 | 0.34 | 26.47 | 69.39 | 0.82 | 131.33 | 0.11 | 2.57 | 7.30 | 0.03 |
| MP015023 | 16.31 | 12.99 | 0.15 | 0.72 | 0.91 | 105.70 | 0.06 | 0.23 | 44.70 | 60.40 | 0.97 | 197.51 | 0.12 | 6.04 | 6.98 | 0.05 |
| MP015024 | 18.81 | 12.21 | 0.17 | 0.69 | 0.76 | 132.00 | 0.03 | 0.21 | 30.69 | 72.93 | 0.66 | 183.48 | 0.12 | 6.60 | 8.51 | 0.05 |
| MP015025 | 22.18 | 16.13 | 0.20 | 0.81 | 1.01 | 204.96 | 0.07 | 0.46 | 32.59 | 89.38 | 0.87 | 196.90 | 0.22 | 6.72 | 10.75 | 0.06 |
| MP015026 | 30.96 | 12.90 | 0.21 | 0.93 | 2.06 | 314.76 | 0.05 | 1.41 | 45.41 | 71.72 | 0.93 | 163.06 | 0.33 | 10.32 | 15.53 | 0.05 |
| MP015027 | 13.32 | 6.92 | 0.38 | 0.74 | 0.55 | 67.47 | 0.02 | 0.14 | 19.38 | 37.54 | 0.50 | 107.78 | 0.06 | 3.46 | 4.34 | 0.02 |
| MP015028 | 27.96 | 18.32 | 0.29 | 1.06 | 1.49 | 197.62 | 0.05 | 0.46 | 41.93 | 107.97 | 1.06 | 254.50 | 0.23 | 9.64 | 13.11 | 0.06 |
| MP015029 | 35.28 | 49.63 | 0.72 | 1.26 | 2.39 | 340.86 | 0.60 | 1.00 | 48.44 | 180.00 | 1.79 | 451.49 | 0.57 | 11.96 | 21.35 | 0.10 |
| MP015030 | 30.87 | 19.46 | 0.20 | 1.34 | 2.62 | 261.69 | 0.13 | 0.44 | 71.80 | 97.30 | 1.14 | 197.27 | 0.27 | 3.36 | 10.40 | 0.06 |
| MP015031 | 4.10 | 13.86 | 0.08 | 0.50 | 2.23 | 22.00 | 0.04 | 0.07 | 6.00 | 11.00 | 0.08 | 21.40 | 0.13 | 0.50 | 6.09 | 0.01 |
| MP015092 | 15.12 | 28.39 | 0.36 | 0.91 | 3.99 | 138.60 | 0.12 | 0.29 | 39.90 | 43.68 | 0.55 | 139.02 | 0.25 | 4.20 | 11.48 | 0.05 |
| MP015093 | 32.62 | 20.94 | 0.11 | 0.22 | 1.65 | 193.28 | 0.07 | 0.38 | 80.33 | 87.58 | 2.11 | 341.26 | 0.08 | 6.04 | 3.81 | 0.08 |
| MP015094 | 13.46 | 23.12 | 0.28 | 0.90 | 1.92 | 168.30 | 0.11 | 0.26 | 53.48 | 41.89 | 0.67 | 154.09 | 0.42 | 3.74 | 19.63 | 0.05 |
| MP015095 | 31.02 | 11.54 | 0.16 | 0.72 | 0.92 | 389.16 | 0.04 | 0.45 | 37.79 | 163.00 | 1.64 | 357.58 | 0.33 | 5.64 | 9.91 | 0.08 |
| MP015096 | 21.09 | 20.19 | 0.25 | 0.49 | 1.07 | 226.86 | 0.08 | 0.45 | 21.49 | 89.95 | 0.80 | 144.87 | 0.24 | 7.96 | 14.05 | 0.05 |
| MP015097 | 27.60 | 4.50 | 0.03 | 0.09 | 0.17 | 218.36 | 0.02 | 0.54 | 34.61 | 108.36 | 1.15 | 293.34 | 0.05 | 8.24 | 2.21 | 0.09 |
| MP015098 | 7.30 | 19.34 | 0.29 | 0.59 | 2.23 | 44.00 | 0.12 | 0.06 | 6.80 | 20.10 | 0.23 | 68.60 | 0.46 | 1.00 | 9.14 | 0.02 |
| MP015099 | 23.44 | 1.70 | 0.01 | 0.13 | 0.11 | 111.34 | 0.01 | 0.59 | 28.71 | 38.68 | 3.57 | 392.03 | 0.03 | 5.86 | 0.53 | 0.07 |
| MP015100 | 1.90 | 6.99 | 0.06 | 0.37 | 0.50 | 12.00 | 0.02 | 0.01 | 10.40 | 5.70 | 0.17 | 18.50 | 0.15 | 1.00 | 2.50 | 0.00 |
| MP015101 | 6.26 | 13.20 | 0.40 | 0.66 | 1.09 | 185.84 | 0.07 | 0.11 | 16.01 | 30.73 | 0.29 | 53.18 | 0.17 | 1.84 | 15.41 | 0.02 |
| MP015102 | 21.78 | 1.70 | 0.02 | 0.13 | 0.15 | 158.40 | 0.01 | 0.78 | 22.44 | 93.39 | 0.69 | 126.72 | 0.02 | 6.60 | 1.25 | 0.05 |
| MP015032 | 34.58 | 43.39 | 0.47 | 1.08 | 1.97 | 223.74 | 0.47 | 0.39 | 94.24 | 155.94 | 3.12 | 549.86 | 0.32 | 6.78 | 12.75 | 0.10 |
| MP015033 | 21.58 | 21.58 | 0.33 | 0.91 | 1.20 | 195.05 | 0.29 | 0.49 | 40.67 | 88.40 | 1.41 | 248.17 | 0.34 | 4.15 | 10.67 | 0.05 |
| MP015034 | 31.40 | 28.06 | 0.53 | 0.94 | 1.94 | 280.56 | 0.20 | 0.55 | 70.81 | 152.97 | 1.87 | 412.82 | 0.23 | 6.68 | 19.44 | 0.09 |
| MP015035 | 35.02 | 34.23 | 0.72 | 2.07 | 4.46 | 390.04 | 0.16 | 0.57 | 70.05 | 225.27 | 1.75 | 409.94 | 0.44 | 3.98 | 22.61 | 0.09 |
| MP015036 | 59.19 | 85.35 | 1.37 | 1.62 | 6.67 | 249.20 | 1.37 | 0.85 | 294.06 | 157.00 | 1.87 | 629.23 | 0.22 | 18.69 | 18.25 | 0.09 |
| MP015037 | 22.69 | 40.26 | 0.66 | 2.12 | 2.85 | 351.36 | 0.22 | 0.31 | 91.50 | 105.41 | 0.95 | 367.46 | 0.43 | 7.32 | 6.37 | 0.09 |
| MP015038 | 37.33 | 36.60 | 2.12 | 2.12 | 2.85 | 270.84 | 0.37 | 0.66 | 72.47 | 189.59 | 2.34 | 507.28 | 0.36 | 21.96 | 19.47 | 0.09 |
| MP015039 | 31.10 | 44.62 | 0.41 | 1.55 | 2.64 | 236.60 | 0.41 | 0.29 | 112.22 | 137.23 | 2.30 | 594.20 | 0.32 | 6.76 | 9.87 | 0.09 |
| MP015040 | 49.39 | 83.10 | 0.78 | 1.25 | 2.67 | 258.72 | 0.86 | 0.48 | 147.39 | 214.03 | 4.16 | 825.55 | 0.45 | 7.84 | 15.52 | 0.15 |
| MP015041 | 25.75 | 41.76 | 0.28 | 1.11 | 2.02 | 313.20 | 0.35 | 0.84 | 67.51 | 231.07 | 2.64 | 495.55 | 0.39 | 6.96 | 17.96 | 0.10 |
| MP015042 | 11.60 | 15.08 | 0.09 | 0.75 | 0.81 | 130.50 | 0.09 | 0.34 | 32.19 | 75.98 | 0.99 | 191.98 | 0.15 | 1.45 | 5.48 | 0.03 |
| MP015043 | 32.80 | 30.83 | 0.66 | 1.44 | 2.69 | 590.40 | 0.20 | 0.49 | 64.29 | 289.30 | 1.71 | 352.93 | 0.74 | 3.28 | 22.17 | 0.09 |
| MP015044 | 30.46 | 49.98 | 0.39 | 1.17 | 2.26 | 328.02 | 0.47 | 0.33 | 78.88 | 171.04 | 2.34 | 526.39 | 0.42 | 3.91 | 13.36 | 0.10 |
| MP015045 | 20.75 | 20.75 | 0.41 | 1.43 | 1.57 | 221.28 | 0.14 | 0.30 | 62.24 | 131.85 | 1.61 | 264.61 | 0.36 | 2.31 | 11.89 | 0.05 |
| MP015046 | 22.39 | 34.74 | 0.23 | 0.54 | 1.31 | 247.04 | 0.39 | 0.19 | 88.78 | 140.50 | 3.17 | 535.77 | 0.19 | 3.86 | 9.80 | 0.08 |
| MP015047 | 38.84 | 59.08 | 0.71 | 0.55 | 2.57 | 224.27 | 0.27 | 0.60 | 91.35 | 282.80 | 4.05 | 497.22 | 0.12 | 5.47 | 15.92 | 0.10 |
| MP015048 | 4.90 | 3.40 | 0.04 | 0.11 | 0.19 | 44.00 | 0.02 | 0.03 | 7.50 | 22.30 | 0.18 | 47.50 | 0.05 | 1.00 | 2.02 | 0.01 |
| MP015049 | 5.50 | 4.60 | 0.05 | 0.07 | 0.39 | 46.00 | 0.02 | 0.03 | 12.30 | 24.40 | 0.28 | 60.80 | 0.03 | 0.50 | 2.38 | 0.01 |
| MP015050 | 4.00 | 4.60 | 0.04 | 0.04 | 0.26 | 48.00 | 0.03 | 0.03 | 9.50 | 19.70 | 0.28 | 54.90 | 0.05 | 1.00 | 2.13 | 0.01 |
| MP015051 | 4.20 | 4.60 | 0.11 | 0.07 | 0.38 | 39.00 | 0.02 | 0.07 | 8.40 | 23.90 | 0.29 | 64.00 | 0.04 | 1.00 | 2.39 | 0.02 |
| MP015052 | 13.80 | 2.20 | 0.06 | 0.11 | 0.46 | 67.00 | 0.02 | 0.10 | 7.30 | 34.70 | 0.13 | 22.20 | 0.08 | 0.50 | 6.47 | 0.01 |
| MP015053 | 21.67 | 30.06 | 0.35 | 0.56 | 1.96 | 538.23 | 0.21 | 0.41 | 50.33 | 332.03 | 2.73 | 455.05 | 0.43 | 3.50 | 22.58 | 0.14 |
| MP015054 | 13.17 | 9.61 | 0.14 | 0.23 | 0.59 | 74.76 | 0.05 | 0.18 | 27.95 | 50.20 | 0.73 | 134.03 | 0.08 | 1.78 | 5.14 | 0.04 |
| MP015055 | 6.40 | 3.10 | 0.04 | 0.03 | 0.88 | 47.00 | 0.02 | 0.06 | 8.30 | 13.40 | 0.17 | 28.70 | 0.06 | 0.50 | 2.32 | 0.02 |
| MP015056 | 2.60 | 0.25 | 0.01 | 0.03 | 0.08 | 10.00 | 0.01 | 0.01 | 3.90 | 2.90 | 0.09 | 5.50 | 0.03 | 1.00 | 0.24 | 0.00 |
| MP015057 | 14.10 | 2.20 | 0.03 | 0.04 | 0.63 | 83.00 | 0.02 | 0.08 | 10.90 | 17.50 | 0.13 | 19.70 | 0.10 | 0.50 | 4.66 | 0.01 |
| MP015058 | 12.50 | 2.60 | 0.08 | 0.07 | 0.75 | 73.00 | 0.02 | 0.08 | 13.00 | 19.50 | 0.17 | 28.50 | 0.10 | 1.00 | 4.05 | 0.02 |
| MP015059 | 5.00 | 0.70 | 0.01 | 0.04 | 0.09 | 16.00 | 0.01 | 0.01 | 7.40 | 4.20 | 0.14 | 9.20 | 0.04 | 0.50 | 0.47 | 0.00 |

## Appendix 1. QPX B-horizon soil geochemistry, Transect 5000, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

| SAMPLEID | Th Q | Sr Q | Cd Q | Sb Q | Bi Q | V Q | Ca Q | P Q | La Q | Cr Q | Mg Q | Ba Q | Ti Q | B Q | Al Q | Na Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.10 | 0.50 | 0.01 | 0.02 | 0.02 | 2.00 | 0.01 | 0.001 | 0.50 | 0.50 | 0.01 | 0.50 | 0.001 | 1.00 | 0.01 | 0.001 |
| Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | pct | ppm | ppm | pct | ppm | pct | ppm | pct | pct |
| MP015060 | 29.06 | 26.79 | 0.41 | 0.45 | 2.59 | 222.46 | 0.14 | 0.34 | 69.01 | 76.27 | 1.32 | 213.83 | 0.41 | 2.27 | 12.26 | 0.06 |
| MP015061 | 27.34 | 26.11 | 0.65 | 0.45 | 1.71 | 171.36 | 0.12 | 0.47 | 68.54 | 111.79 | 1.75 | 314.57 | 0.17 | 4.08 | 12.61 | 0.09 |
| MP015062 | 18.43 | 17.66 | 0.28 | 0.26 | 0.97 | 102.40 | 0.08 | 0.22 | 28.67 | 68.10 | 0.87 | 221.95 | 0.09 | 2.56 | 7.83 | 0.06 |
| MP015063 | 4.49 | 10.30 | 0.17 | 0.07 | 0.44 | 64.68 | 0.03 | 0.06 | 13.60 | 29.96 | 0.37 | 95.44 | 0.03 | 0.66 | 2.77 | 0.03 |
| MP015064 | 38.98 | 47.71 | 0.34 | 0.87 | 2.22 | 295.68 | 0.20 | 0.55 | 94.75 | 184.13 | 3.23 | 554.40 | 0.33 | 6.72 | 15.72 | 0.14 |
| MP015065 | 1.90 | 2.80 | 0.03 | 0.03 | 0.13 | 19.00 | 0.01 | 0.02 | 5.10 | 10.90 | 0.14 | 32.90 | 0.01 | 1.00 | 0.94 | 0.01 |
| MP015066 | 46.61 | 53.72 | 0.71 | 1.26 | 1.90 | 260.70 | 0.24 | 0.65 | 109.81 | 240.16 | 4.58 | 534.04 | 0.22 | 15.60 | 16.43 | 0.14 |
| MP015067 | 13.38 | 21.61 | 0.17 | 0.38 | 0.82 | 92.61 | 0.14 | 0.20 | 44.59 | 72.37 | 1.37 | 251.42 | 0.07 | 1.72 | 5.28 | 0.05 |
| MP015068 | 4.10 | 5.20 | 0.06 | 0.12 | 0.24 | 43.00 | 0.04 | 0.05 | 11.70 | 16.50 | 0.16 | 53.40 | 0.03 | 2.00 | 1.30 | 0.01 |
| MP015069 | 27.22 | 19.44 | 0.35 | 1.90 | 1.38 | 181.44 | 0.09 | 0.57 | 39.31 | 96.77 | 1.25 | 239.76 | 0.17 | 4.32 | 12.48 | 0.06 |
| MP015070 | 19.45 | 9.86 | 0.27 | 0.93 | 0.85 | 134.26 | 0.05 | 0.19 | 25.21 | 64.66 | 0.63 | 151.25 | 0.14 | 1.37 | 10.88 | 0.04 |
| MP015071 | 13.89 | 20.44 | 0.10 | 1.81 | 0.58 | 96.94 | 0.03 | 0.31 | 29.87 | 43.23 | 0.60 | 137.81 | 0.07 | 1.31 | 6.13 | 0.03 |
| MP015072 | 16.28 | 20.53 | 0.21 | 1.13 | 0.96 | 95.58 | 0.11 | 0.27 | 41.42 | 55.22 | 1.24 | 270.10 | 0.10 | 3.54 | 6.51 | 0.05 |
| MP015073 | 13.21 | 23.37 | 0.56 | 1.73 | 0.81 | 111.76 | 0.15 | 0.33 | 23.37 | 69.34 | 0.66 | 209.04 | 0.13 | 7.62 | 7.29 | 0.05 |
| MP015074 | 5.41 | 6.03 | 0.06 | 0.14 | 0.24 | 38.48 | 0.02 | 0.11 | 11.13 | 26.62 | 0.34 | 68.54 | 0.04 | 2.08 | 2.58 | 0.02 |
| MP015075 | 12.54 | 8.82 | 0.16 | 0.12 | 0.73 | 78.40 | 0.04 | 0.20 | 16.27 | 43.32 | 0.33 | 109.17 | 0.07 | 1.96 | 6.55 | 0.03 |
| MP015076 | 3.50 | 3.50 | 0.05 | 0.09 | 0.20 | 29.00 | 0.03 | 0.15 | 5.80 | 14.40 | 0.14 | 43.20 | 0.03 | 1.00 | 1.78 | 0.01 |
| MP015077 | 17.26 | 13.70 | 0.30 | 0.77 | 0.82 | 112.34 | 0.14 | 0.37 | 26.85 | 67.95 | 0.88 | 164.67 | 0.13 | 5.48 | 7.73 | 0.04 |
| MP015078 | 27.68 | 34.60 | 0.28 | 1.80 | 1.66 | 193.76 | 0.14 | 0.44 | 56.05 | 217.29 | 2.77 | 485.09 | 0.17 | 6.92 | 16.61 | 0.09 |
| MP015079 | 8.01 | 11.28 | 0.07 | 0.60 | 0.44 | 81.90 | 0.04 | 0.08 | 16.38 | 60.24 | 0.64 | 121.39 | 0.05 | 1.82 | 5.13 | 0.04 |
| MP015080 | 32.13 | 48.96 | 0.31 | 0.84 | 1.45 | 221.85 | 0.23 | 0.39 | 93.33 | 211.14 | 3.21 | 487.31 | 0.14 | 15.30 | 13.62 | 0.14 |
| MP015081 | 30.51 | 58.31 | 0.88 | 0.81 | 1.49 | 237.30 | 0.47 | 0.57 | 69.83 | 199.33 | 2.71 | 477.31 | 0.20 | 13.56 | 15.12 | 0.14 |
| MP015082 | 24.25 | 32.71 | 0.23 | 0.51 | 1.58 | 186.12 | 0.23 | 0.27 | 68.24 | 131.98 | 2.14 | 318.10 | 0.17 | 5.64 | 9.64 | 0.11 |
| MP015083 | 30.40 | 65.60 | 0.64 | 2.08 | 2.08 | 280.00 | 1.52 | 0.35 | 87.20 | 160.80 | 2.56 | 485.60 | 0.23 | 16.00 | 10.72 | 0.11 |
| MP015084 | 44.08 | 88.92 | 0.99 | 2.74 | 2.74 | 273.60 | 2.28 | 2.07 | 82.84 | 186.96 | 1.98 | 657.40 | 0.24 | 15.20 | 18.32 | 0.13 |
| MP015085 | 59.44 | 35.66 | 0.82 | 1.86 | 2.23 | 297.20 | 0.22 | 1.33 | 67.61 | 230.33 | 1.56 | 387.10 | 0.18 | 7.43 | 29.42 | 0.11 |
| MP015086 | 27.54 | 21.10 | 0.23 | 1.05 | 1.58 | 251.98 | 0.06 | 0.58 | 56.26 | 108.41 | 0.88 | 226.20 | 0.12 | 5.86 | 10.31 | 0.06 |
| MP015087 | 26.84 | 20.50 | 0.20 | 1.17 | 1.27 | 180.56 | 0.10 | 0.39 | 54.66 | 108.34 | 1.12 | 240.10 | 0.11 | 4.88 | 9.17 | 0.06 |
| MP015088 | 18.73 | 10.75 | 0.12 | 1.07 | 0.68 | 119.73 | 0.03 | 0.31 | 24.56 | 80.13 | 0.83 | 132.93 | 0.10 | 3.07 | 8.04 | 0.03 |
| MP015089 | 13.16 | 11.61 | 0.08 | 0.28 | 0.77 | 144.48 | 0.03 | 0.27 | 22.96 | 74.56 | 0.44 | 73.53 | 0.11 | 2.58 | 7.12 | 0.03 |
| MP015090 | 7.48 | 9.18 | 0.03 | 0.20 | 0.48 | 90.10 | 0.02 | 0.19 | 14.79 | 59.84 | 0.36 | 67.32 | 0.06 | 5.10 | 4.66 | 0.02 |
| MP015091 | 16.95 | 16.95 | 0.14 | 0.59 | 0.87 | 131.48 | 0.07 | 0.40 | 37.71 | 88.58 | 0.83 | 176.11 | 0.10 | 6.92 | 8.44 | 0.05 |

Appendix 1. QPX B-horizon soil geochemistry, Transect 5000, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

| SAMPLEID | K Q | W Q | Sc Q | Tl Q | S Q | Hg Q | Se Q | Te Q | Ga Q | Sn Q | Zr Q | In Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.01 | 0.20 | 0.10 | 0.02 | 0.01 | 5.00 | 0.10 | 0.02 | 0.10 | 0.10 | 0.10 | 0.02 |
| Unit | pct | ppm | ppm | ppm | pct | ppb | ppm | ppm | ppm | ppm | ppm | ppm |
| MP015006 | 0.20 | < .2 | 3.17 | 0.13 | 0.01 | < 5 | 0.06 | < .02 | 14.27 | 3.05 | 3.42 | 0.05 |
| MP015005 | 1.07 | < .2 | 11.54 | 0.60 | 0.02 | < 5 | 0.40 | < .02 | 33.83 | 6.77 | 19.50 | 0.24 |
| MP015004 | 0.63 | < .2 | 8.80 | 0.50 | 0.01 | < 5 | 0.28 | < .02 | 29.43 | 7.15 | 14.03 | 0.17 |
| MP015003 | 0.74 | < .2 | 7.36 | 0.37 | 0.01 | < 5 | 0.46 | < .02 | 17.71 | 4.60 | 7.82 | 0.12 |
| MP015002 | 2.47 | < .2 | 13.14 | 1.47 | 0.08 | < 5 | 0.77 | < .02 | 62.61 | 14.69 | 32.47 | 0.31 |
| MP015001 | 2.41 | < .2 | 16.99 | 1.42 | 0.04 | < 5 | 0.71 | < .02 | 78.59 | 14.16 | 41.77 | 0.28 |
| MP015007 | 2.30 | < .2 | 20.88 | 1.37 | 0.04 | < 5 | 1.44 | < .02 | 66.96 | 14.40 | 34.56 | 0.36 |
| MP015008 | 0.14 | < .2 | 1.00 | 0.13 | 0.01 | < 5 | 0.10 | < .02 | 4.40 | 0.80 | 2.60 | 0.01 |
| MP015009 | 1.49 | < .2 | 9.96 | 0.85 | 0.05 | < 5 | 1.00 | < .02 | 34.86 | 9.96 | 22.91 | 0.20 |
| MP015010 | 1.95 | < .2 | 16.96 | 1.36 | 0.08 | < 5 | 1.70 | < .02 | 65.30 | 14.42 | 46.64 | 0.42 |
| MP015011 | 1.62 | < .2 | 14.93 | 0.87 | 0.06 | < 5 | 0.62 | < .02 | 48.52 | 10.57 | 29.23 | 0.31 |
| MP015012 | 1.93 | < .2 | 21.48 | 1.36 | 0.29 | < 5 | 2.86 | < .02 | 62.29 | 13.60 | 56.56 | 0.50 |
| MP015013 | 1.99 | < .2 | 18.51 | 1.28 | 0.14 | < 5 | 2.14 | < .02 | 64.08 | 12.10 | 42.72 | 0.28 |
| MP015014 | 2.55 | < .2 | 18.23 | 1.17 | 0.07 | < 5 | 1.46 | < .02 | 61.24 | 12.39 | 40.10 | 0.36 |
| MP015015 | 0.70 | < .2 | 14.43 | 0.53 | 0.07 | < 5 | 0.70 | < .02 | 43.65 | 9.86 | 24.29 | 0.25 |
| MP015016 | 0.66 | < .2 | 11.88 | 4.49 | 0.59 | < 5 | 3.96 | 0.07 | 21.12 | 6.60 | 14.52 | 0.13 |
| MP015017 | 1.34 | < .2 | 31.40 | 2.27 | 0.40 | < 5 | 2.00 | < .02 | 123.58 | 15.36 | 27.39 | 0.33 |
| MP015018 | 1.77 | < .2 | 16.02 | 1.03 | 0.11 | < 5 | 1.72 | < .02 | 47.48 | 10.30 | 36.61 | 0.40 |
| MP015019 | 1.88 | < .2 | 14.52 | 1.51 | 0.03 | < 5 | 0.61 | < .02 | 47.19 | 11.50 | 24.20 | 0.30 |
| MP015020 | 2.14 | < .2 | 12.26 | 1.53 | 0.08 | < 5 | 3.06 | < .02 | 67.41 | 15.32 | 52.85 | 0.38 |
| MP015021 | 1.25 | < .2 | 10.10 | 0.93 | 0.24 | < 5 | 1.62 | < .02 | 33.94 | 6.46 | 4.85 | 0.20 |
| MP015022 | 0.75 | < .2 | 4.88 | 0.49 | 0.10 | < 5 | 1.03 | < .02 | 20.05 | 4.37 | 3.08 | 0.10 |
| MP015023 | 1.06 | < .2 | 5.74 | 0.66 | 0.12 | < 5 | 0.60 | < .02 | 25.07 | 5.74 | 16.91 | 0.12 |
| MP015024 | 0.96 | < .2 | 6.60 | 0.63 | 0.13 | < 5 | 0.99 | < .02 | 25.41 | 5.94 | 18.46 | 0.13 |
| MP015025 | 1.04 | < .2 | 8.40 | 0.64 | 0.13 | < 5 | 1.34 | < .02 | 39.65 | 9.07 | 5.71 | 0.20 |
| MP015026 | 1.29 | < .2 | 11.87 | 1.19 | 0.10 | < 5 | 1.55 | < .02 | 72.24 | 14.45 | 1.55 | 0.21 |
| MP015027 | 0.57 | < .2 | 4.50 | 0.43 | 0.03 | < 5 | 0.69 | < .02 | 13.32 | 4.15 | 2.94 | 0.10 |
| MP015028 | 1.16 | < .2 | 9.16 | 0.82 | 0.02 | < 5 | 1.93 | < .02 | 34.70 | 8.68 | 28.92 | 0.24 |
| MP015029 | 1.91 | < .2 | 14.35 | 1.20 | 0.12 | < 5 | 2.39 | < .02 | 66.98 | 12.56 | 13.75 | 0.36 |
| MP015030 | 1.61 | < .2 | 12.08 | 1.34 | 0.03 | < 5 | 1.34 | < .02 | 48.98 | 15.43 | 26.84 | 0.27 |
| MP015031 | 1.09 | < .2 | 6.30 | 0.92 | 0.02 | < 5 | 0.42 | < .02 | 33.60 | 1.10 | 12.18 | 0.21 |
| MP015092 | 2.23 | < .2 | 10.27 | 2.30 | 0.06 | < 5 | 1.81 | < .02 | 56.17 | 10.50 | 27.78 | 0.36 |
| MP015093 | 1.31 | < .2 | 6.73 | 0.90 | 0.02 | < 5 | 0.75 | < .02 | 33.29 | 18.12 | 7.48 | 0.11 |
| MP015094 | 1.52 | < .2 | 14.66 | 1.18 | 0.06 | < 5 | 1.13 | < .02 | 76.14 | 9.35 | 30.46 | 0.34 |
| MP015095 | 0.80 | < .2 | 11.14 | 0.76 | 0.02 | < 5 | 0.80 | < .02 | 58.51 | 16.92 | 16.32 | 0.28 |
| MP015096 | 1.44 | < .2 | 10.71 | 0.91 | 0.02 | < 5 | 1.24 | < .02 | 54.80 | 15.92 | 11.12 | 0.21 |
| MP015097 | 0.27 | < .2 | 2.00 | 0.17 | 0.01 | < 5 | 0.10 | < .02 | 10.30 | 12.77 | 3.50 | 0.03 |
| MP015098 | 1.99 | < .2 | 15.82 | 1.11 | 0.03 | < 5 | 0.29 | < .02 | 68.56 | 2.60 | 19.92 | 0.35 |
| MP015099 | 0.14 | < .2 | 1.00 | 0.07 | 0.02 | < 5 | 0.05 | < .02 | 3.30 | 16.99 | 2.60 | 0.02 |
| MP015100 | 0.39 | < .2 | 3.86 | 0.29 | 0.02 | < 5 | 0.18 | < .02 | 25.76 | 0.70 | 4.60 | 0.07 |
| MP015101 | 0.73 | < .2 | 9.90 | 0.50 | 0.03 | < 5 | 1.98 | < .02 | 33.33 | 6.07 | 1.65 | 0.17 |
| MP015102 | 0.14 | < .2 | 1.50 | 0.09 | 0.02 | < 5 | 0.10 | < .02 | 4.10 | 7.92 | 3.40 | 0.02 |
| MP015032 | 2.37 | < .2 | 16.95 | 1.63 | 0.20 | < 5 | 1.36 | < .02 | 45.43 | 10.85 | 33.22 | 0.34 |
| MP015033 | 1.20 | < .2 | 11.62 | 0.71 | 0.12 | < 5 | 0.42 | < .02 | 42.75 | 9.13 | 15.77 | 0.21 |
| MP015034 | 2.27 | < .2 | 19.37 | 1.47 | 0.20 | < 5 | 1.34 | < .02 | 68.14 | 16.70 | 28.72 | 0.40 |
| MP015035 | 2.63 | < .2 | 18.31 | 1.59 | 0.32 | < 5 | 2.39 | < .02 | 90.74 | 15.92 | 45.37 | 0.40 |
| MP015036 | 2.62 | < .2 | 23.67 | 1.06 | 0.37 | < 5 | 3.12 | 0.03 | 46.73 | 11.21 | 37.38 | 0.56 |
| MP015037 | 2.49 | < .2 | 10.98 | 1.32 | 0.04 | < 5 | 0.37 | < .02 | 64.42 | 16.84 | 27.82 | 0.22 |
| MP015038 | 2.20 | < .2 | 18.30 | 1.46 | 0.07 | < 5 | 1.46 | 0.02 | 51.24 | 10.25 | 35.87 | 0.44 |
| MP015039 | 2.30 | < .2 | 16.22 | 1.55 | 0.03 | < 5 | 0.68 | < .02 | 45.29 | 12.17 | 32.45 | 0.34 |
| MP015040 | 2.74 | < .2 | 18.82 | 1.65 | 0.04 | < 5 | 0.39 | < .02 | 41.55 | 11.76 | 54.10 | 0.31 |
| MP015041 | 1.88 | < .2 | 18.10 | 1.32 | 0.07 | < 5 | 1.39 | < .02 | 54.29 | 11.83 | 22.97 | 0.42 |
| MP015042 | 0.81 | < .2 | 8.41 | 0.58 | 0.03 | < 5 | 0.29 | < .02 | 24.07 | 5.51 | 11.02 | 0.15 |
| MP015043 | 1.84 | < .2 | 22.30 | 1.05 | 0.26 | < 5 | 1.97 | 0.03 | 104.30 | 19.02 | 39.36 | 0.52 |
| MP015044 | 2.50 | < .2 | 18.74 | 1.25 | 0.16 | < 5 | 0.78 | < .02 | 64.04 | 15.62 | 37.49 | 0.39 |
| MP015045 | 1.15 | < .2 | 11.99 | 0.69 | 0.14 | < 5 | 0.92 | < .02 | 37.34 | 7.38 | 31.35 | 0.28 |
| MP015046 | 2.32 | < .2 | 19.30 | 1.16 | 0.15 | < 5 | 0.39 | < .02 | 53.27 | 10.81 | 22.39 | 0.23 |
| MP015047 | 2.46 | < .2 | 17.50 | 0.98 | 0.16 | < 5 | 2.19 | 0.02 | 45.40 | 9.30 | 20.79 | 0.33 |
| MP015048 | 0.21 | < .2 | 2.20 | 0.13 | 0.02 | < 5 | 0.20 | < .02 | 9.20 | 2.00 | 3.90 | 0.03 |
| MP015049 | 0.27 | < .2 | 2.90 | 0.21 | 0.04 | < 5 | 0.20 | < .02 | 10.70 | 2.60 | 4.80 | 0.04 |
| MP015050 | 0.24 | < .2 | 2.70 | 0.16 | 0.01 | < 5 | 0.20 | < .02 | 11.30 | 3.00 | 3.10 | 0.04 |
| MP015051 | 0.29 | < .2 | 2.40 | 0.12 | 0.01 | < 5 | 0.20 | < .02 | 9.10 | 2.30 | 3.60 | 0.04 |
| MP015052 | 0.12 | < .2 | 4.40 | 0.04 | 0.07 | < 5 | 0.60 | < .02 | 16.30 | 3.30 | 7.20 | 0.07 |
| MP015053 | 1.68 | < .2 | 30.06 | 1.19 | 0.21 | < 5 | 1.40 | < .02 | 73.40 | 15.38 | 19.57 | 0.49 |
| MP015054 | 0.69 | < .2 | 5.34 | 0.39 | 0.07 | < 5 | 0.36 | < .02 | 17.44 | 4.81 | 8.37 | 0.09 |
| MP015055 | 0.18 | < .2 | 1.80 | 0.14 | 0.02 | < 5 | 0.20 | 0.03 | 20.00 | 5.30 | 3.60 | 0.03 |
| MP015056 | 0.05 | < .2 | 0.70 | 0.04 | 0.01 | < 5 | 0.05 | < .02 | 2.30 | 1.00 | 0.90 | 0.01 |
| MP015057 | 0.14 | < .2 | 3.00 | 0.08 | 0.04 | < 5 | 0.20 | < .02 | 24.70 | 5.60 | 5.20 | 0.05 |
| MP015058 | 0.19 | < .2 | 3.40 | 0.11 | 0.04 | < 5 | 0.10 | < .02 | 21.10 | 4.90 | 4.80 | 0.06 |
| MP015059 | 0.08 | < .2 | 1.20 | 0.06 | 0.01 | < 5 | 0.05 | < .02 | 3.40 | 1.20 | 1.50 | 0.01 |

Appendix 1. QPX B-horizon soil geochemistry, Transect 5000, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

| SAMPLEID | K Q | W Q | Sc Q | Tl Q | S Q | Hg Q | Se Q | Te Q | Ga Q | Sn Q | Zr Q | In Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.01 | 0.20 | 0.10 | 0.02 | 0.01 | 5.00 | 0.10 | 0.02 | 0.10 | 0.10 | 0.10 | 0.02 |
| Unit | pct | ppm | ppm | ppm | pct | ppb | ppm | ppm | ppm | ppm | ppm | ppm |
| MP015060 | 1.32 | < .2 | 11.80 | 0.64 | 0.27 | < 5 | 1.36 | < .02 | 87.62 | 21.34 | 14.53 | 0.32 |
| MP015061 | 1.84 | < .2 | 13.46 | 0.86 | 0.20 | < 5 | 2.04 | < .02 | 45.70 | 11.42 | 17.14 | 0.20 |
| MP015062 | 1.10 | < .2 | 7.94 | 0.59 | 0.05 | < 5 | 1.02 | < .02 | 27.14 | 7.17 | 11.52 | 0.13 |
| MP015063 | 0.51 | < .2 | 3.83 | 0.26 | 0.03 | < 5 | 0.40 | < .02 | 13.73 | 3.70 | 3.17 | 0.04 |
| MP015064 | 3.16 | < .2 | 19.49 | 1.34 | 0.13 | < 5 | 2.02 | < .02 | 73.25 | 18.82 | 31.58 | 0.27 |
| MP015065 | 0.19 | < .2 | 1.20 | 0.10 | 0.03 | < 5 | 0.10 | < .02 | 4.90 | 1.10 | 1.80 | 0.01 |
| MP015066 | 3.48 | < .2 | 20.54 | 1.19 | 0.16 | < 5 | 2.37 | < .02 | 60.83 | 10.27 | 44.24 | 0.24 |
| MP015067 | 1.23 | < .2 | 7.20 | 0.55 | 0.10 | < 5 | 0.69 | < .02 | 23.67 | 4.80 | 12.35 | 0.07 |
| MP015068 | 0.27 | < .2 | 2.00 | 0.15 | 0.01 | < 5 | 0.20 | < .02 | 8.20 | 2.20 | 3.10 | 0.02 |
| MP015069 | 1.17 | < .2 | 12.10 | 0.82 | 0.17 | < 5 | 2.59 | < .02 | 40.61 | 10.80 | 11.23 | 0.22 |
| MP015070 | 0.77 | < .2 | 7.95 | 0.44 | 0.22 | < 5 | 3.29 | < .02 | 33.70 | 7.40 | 13.15 | 0.16 |
| MP015071 | 0.79 | < .2 | 5.76 | 0.55 | 0.08 | < 5 | 1.57 | < .02 | 21.48 | 5.76 | 8.12 | 0.13 |
| MP015072 | 1.20 | < .2 | 6.73 | 0.64 | 0.07 | < 5 | 0.71 | < .02 | 23.72 | 4.60 | 14.16 | 0.11 |
| MP015073 | 0.94 | < .2 | 6.10 | 0.41 | 0.03 | < 5 | 0.51 | < .02 | 29.72 | 7.37 | 8.13 | 0.13 |
| MP015074 | 0.38 | < .2 | 2.50 | 0.20 | 0.05 | < 5 | 0.21 | < .02 | 9.88 | 2.29 | 4.26 | 0.03 |
| MP015075 | 0.57 | < .2 | 4.12 | 0.33 | 0.10 | < 5 | 0.78 | 0.02 | 23.91 | 5.88 | 8.04 | 0.10 |
| MP015076 | 0.18 | < .2 | 1.50 | 0.11 | 0.02 | < 5 | 0.20 | < .02 | 7.50 | 1.70 | 3.00 | 0.01 |
| MP015077 | 0.79 | < .2 | 6.58 | 0.41 | 0.11 | < 5 | 1.64 | < .02 | 24.93 | 5.48 | 10.41 | 0.14 |
| MP015078 | 1.87 | < .2 | 15.22 | 0.83 | 0.21 | < 5 | 2.77 | 0.03 | 40.83 | 7.61 | 29.06 | 0.28 |
| MP015079 | 0.73 | < .2 | 5.10 | 0.35 | 0.11 | < 5 | 0.91 | < .02 | 18.38 | 3.64 | 6.73 | 0.09 |
| MP015080 | 3.14 | < .2 | 17.60 | 1.22 | 0.15 | < 5 | 0.77 | < .02 | 50.49 | 9.18 | 26.78 | 0.15 |
| MP015081 | 2.98 | < .2 | 16.27 | 1.08 | 0.34 | < 5 | 2.71 | < .02 | 56.27 | 10.85 | 27.12 | 0.27 |
| MP015082 | 2.09 | < .2 | 12.41 | 0.85 | 0.28 | < 5 | 1.69 | < .02 | 42.86 | 9.59 | 20.30 | 0.23 |
| MP015083 | 2.00 | < .2 | 13.60 | 0.96 | 0.08 | < 5 | 0.80 | < .02 | 48.80 | 10.40 | 33.60 | 0.24 |
| MP015084 | 2.51 | < .2 | 15.96 | 1.29 | 0.53 | < 5 | 2.28 | < .02 | 62.32 | 12.16 | 7.60 | 0.38 |
| MP015085 | 2.23 | < .2 | 23.03 | 1.26 | 0.30 | < 5 | 2.23 | 0.02 | 63.90 | 15.60 | 13.37 | 0.45 |
| MP015086 | 1.47 | < .2 | 13.48 | 1.05 | 0.18 | < 5 | 0.59 | < .02 | 49.81 | 14.06 | 16.41 | 0.29 |
| MP015087 | 1.32 | < .2 | 11.22 | 0.88 | 0.10 | < 5 | 0.98 | < .02 | 32.21 | 9.76 | 19.03 | 0.15 |
| MP015088 | 0.71 | < .2 | 6.14 | 0.46 | 0.12 | < 5 | 0.61 | < .02 | 21.18 | 4.91 | 13.51 | 0.12 |
| MP015089 | 0.54 | < .2 | 5.93 | 0.44 | 0.10 | < 5 | 0.77 | < .02 | 32.25 | 7.22 | 10.32 | 0.15 |
| MP015090 | 0.32 | < .2 | 3.57 | 0.27 | 0.01 | < 5 | 0.68 | < .02 | 16.83 | 3.06 | 5.78 | 0.07 |
| MP015091 | 0.97 | < .2 | 7.27 | 0.59 | 0.02 | < 5 | 1.04 | < .02 | 27.33 | 5.88 | 10.03 | 0.14 |

## Appendix 2. QPX B-horizon soil geochemistry, Transect 6000, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

| SAMPLEID | Order | Geology | Mo Q | Cu Q | Pb Q | Zn Q | Ag Q | Ni Q | Co Q | Mn Q | Fe Q | As Q | U Q | Au Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | NW to SE | | 0.01 | 0.01 | 0.01 | 0.10 | 2.00 | 0.10 | 0.10 | 1.00 | 0.01 | 0.10 | 0.10 | 0.20 |
| Unit | | | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | pct | ppm | ppm | ppb |
| MP016118 | 1 | OFLfv | 4.63 | 55.66 | 287.88 | 549.58 | 235.20 | 55.66 | 28.22 | 2140.32 | 24.15 | 96.43 | 6.27 | 3.14 |
| MP016117 | 2 | OFLfv | 2.46 | 26.40 | 149.16 | 387.60 | 218.88 | 21.43 | 12.31 | 829.92 | 12.08 | 53.35 | 3.19 | 3.19 |
| MP016116 | 3 | OFLfv | 1.59 | 21.06 | 108.82 | 220.64 | 80.64 | 16.13 | 11.87 | 627.20 | 5.64 | 31.36 | 2.24 | 2.46 |
| MP016100 | 4 | OFLfv | 2.41 | 23.69 | 133.84 | 305.83 | 355.32 | 16.07 | 11.84 | 900.99 | 10.36 | 40.19 | 3.38 | 1.27 |
| MP016101 | 5 | OFLfv | 4.26 | 45.78 | 280.20 | 457.78 | 822.80 | 32.16 | 19.45 | 1540.88 | 20.50 | 98.74 | 5.98 | 2.24 |
| MP016102 | 6 | OFLfv | 0.51 | 4.03 | 30.12 | 28.80 | 105.27 | 3.15 | 1.57 | 154.88 | 2.50 | 10.16 | 0.61 | 0.48 |
| MP016103 | 7 | OFLfv | 1.83 | 20.87 | 134.37 | 164.94 | 438.06 | 16.09 | 7.60 | 514.05 | 9.92 | 33.53 | 2.24 | 2.68 |
| MP016104 | 8 | OFLfv | 2.28 | 20.88 | 178.89 | 160.83 | 416.64 | 15.68 | 8.06 | 501.76 | 11.07 | 44.35 | 3.14 | 1.79 |
| MP016105 | 9 | OFLfv | 5.38 | 41.54 | 353.14 | 407.10 | 282.90 | 37.26 | 26.91 | 1642.20 | 15.80 | 70.38 | 6.90 | 4.14 |
| MP016106 | 10 | OFLfv | 0.39 | 6.20 | 35.57 | 40.80 | 30.00 | 4.30 | 2.90 | 161.00 | 1.68 | 6.90 | 0.60 | 0.20 |
| MP016107 | 11 | OFLfv | 2.39 | 40.87 | 238.64 | 287.45 | 177.92 | 30.02 | 18.90 | 1373.32 | 12.01 | 43.92 | 3.34 | 1.67 |
| MP016108 | 12 | OFLfv | 1.72 | 24.08 | 171.68 | 250.56 | 227.36 | 17.17 | 10.67 | 825.92 | 10.25 | 34.80 | 3.25 | 0.46 |
| MP016109 | 13 | ONFft | 2.12 | 33.18 | 181.10 | 261.40 | 400.40 | 21.16 | 12.01 | 1195.48 | 13.67 | 46.33 | 3.43 | 2.29 |
| MP016110 | 14 | ONFft | 2.54 | 22.69 | 131.44 | 227.76 | 354.78 | 17.08 | 10.07 | 801.54 | 13.32 | 43.80 | 3.07 | 0.88 |
| MP016111 | 15 | ONFft | 1.28 | 14.70 | 74.13 | 176.89 | 239.94 | 12.00 | 7.25 | 619.38 | 7.20 | 23.16 | 1.95 | 15.07 |
| MP016112 | 16 | ONFft | 2.18 | 19.68 | 83.81 | 186.72 | 156.00 | 11.28 | 6.24 | 525.60 | 6.67 | 25.92 | 3.84 | 1.44 |
| MP016113 | 17 | ONFft | 1.57 | 15.92 | 71.56 | 225.11 | 59.94 | 15.98 | 10.32 | 882.45 | 6.73 | 19.31 | 2.33 | 3.66 |
| MP016114 | 18 | ONFft | 7.35 | 27.97 | 213.45 | 355.50 | 174.34 | 33.35 | 17.43 | 1318.92 | 18.42 | 81.11 | 4.55 | 1.52 |
| MP016115 | 19 | ONFft | 2.11 | 29.43 | 187.77 | 235.34 | 580.98 | 19.79 | 10.53 | 682.02 | 10.65 | 40.42 | 3.37 | 0.42 |
| MP016092 | 20 | ONFs | 1.20 | 14.80 | 82.95 | 132.10 | 80.36 | 12.94 | 8.43 | 682.08 | 4.68 | 22.93 | 2.16 | 4.31 |
| MP016093 | 21 | ONFft | 3.82 | 49.66 | 304.89 | 370.98 | 457.86 | 39.92 | 28.18 | 2283.43 | 13.91 | 56.94 | 5.87 | 0.59 |
| MP016094 | 22 | ONFft | 2.60 | 26.14 | 183.59 | 245.50 | 127.68 | 18.14 | 11.87 | 869.12 | 7.93 | 32.03 | 3.58 | 5.60 |
| MP016095 | 23 | ONFft | 1.50 | 20.88 | 113.50 | 237.60 | 135.36 | 19.58 | 11.81 | 1080.00 | 6.85 | 31.10 | 2.88 | 2.02 |
| MP016096 | 24 | ONFft | 2.79 | 35.13 | 234.39 | 378.48 | 132.80 | 39.18 | 22.58 | 1786.16 | 13.94 | 46.48 | 3.98 | 7.30 |
| MP016097 | 25 | ONFft | 2.94 | 33.88 | 172.48 | 245.35 | 199.50 | 29.75 | 16.80 | 1120.00 | 8.33 | 45.85 | 4.20 | 3.50 |
| MP016098 | 26 | OFLfv | 9.74 | 33.84 | 265.29 | 332.17 | 258.98 | 36.60 | 40.54 | 7628.65 | 11.49 | 103.59 | 7.32 | 10.70 |
| MP016099 | 27 | OFLfv | 6.97 | 44.87 | 383.47 | 296.38 | 788.32 | 48.51 | 24.26 | 1478.10 | 21.45 | 73.53 | 5.31 | 3.03 |
| MP016069 | 28 | OFLfv | 3.30 | 34.03 | 215.75 | 454.14 | 309.32 | 35.15 | 24.61 | 2010.58 | 16.73 | 47.80 | 3.52 | 0.70 |
| MP016070 | 29 | OFLfv | 2.27 | 45.74 | 259.62 | 391.56 | 329.12 | 32.43 | 18.39 | 1050.28 | 11.71 | 39.20 | 1.94 | 2.90 |
| MP016071 | 30 | ONFft | 0.57 | 12.90 | 53.50 | 67.10 | 35.00 | 6.10 | 5.00 | 238.00 | 2.14 | 11.70 | 0.40 | 0.20 |
| MP016072 | 31 | ONFft | 2.06 | 28.78 | 128.69 | 430.93 | 253.92 | 27.23 | 17.66 | 1254.88 | 11.15 | 33.86 | 2.58 | 0.37 |
| MP016073 | 32 | ONFft | 3.33 | 35.76 | 134.44 | 407.48 | 270.27 | 41.58 | 21.48 | 1739.43 | 21.28 | 25.64 | 3.47 | 0.69 |
| MP016074 | 33 | OFLfv | 3.47 | 45.18 | 116.35 | 596.67 | 138.60 | 65.14 | 38.12 | 2300.76 | 20.03 | 34.65 | 3.47 | 2.08 |
| MP016075 | 34 | OFLfv | 4.93 | 46.43 | 175.18 | 476.79 | 534.40 | 56.78 | 27.56 | 2212.75 | 24.38 | 81.00 | 4.18 | 22.55 |
| MP016076 | 35 | OFLfv | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| MP016077 | 36 | OFLfv | 9.76 | 17.55 | 254.94 | 680.11 | 153.12 | 47.85 | 54.87 | 8402.46 | 18.95 | 161.41 | 6.38 | 11.48 |
| MP016078 | 37 | OFLfv | 4.35 | 43.45 | 162.50 | 427.39 | 165.90 | 85.32 | 37.13 | 2338.40 | 23.38 | 48.19 | 3.95 | 11.85 |
| MP016079 | 38 | OFLfv | 1.44 | 23.63 | 59.95 | 267.72 | 62.08 | 45.40 | 21.34 | 1191.16 | 12.30 | 13.58 | 1.55 | 8.92 |
| MP016080 | 39 | OFLfv | 2.13 | 22.54 | 73.48 | 265.95 | 59.10 | 35.85 | 22.06 | 1434.16 | 11.15 | 22.46 | 2.36 | 4.73 |
| MP016081 | 40 | OFLfv | 2.82 | 36.98 | 84.68 | 501.77 | 165.60 | 68.45 | 38.09 | 3129.84 | 16.17 | 22.08 | 2.76 | 2.21 |
| MP016082 | 41 | OFLfv | 3.40 | 36.28 | 88.86 | 317.84 | 261.60 | 67.58 | 30.52 | 1203.36 | 15.91 | 47.52 | 4.80 | 3.49 |
| MP016083 | 42 | OFLfv | 2.06 | 42.46 | 83.51 | 413.22 | 331.23 | 83.62 | 35.84 | 2400.06 | 13.85 | 21.72 | 2.17 | 1.63 |
| MP016084 | 43 | OFLfv | 1.44 | 12.64 | 41.80 | 287.72 | 101.08 | 37.54 | 19.86 | 1072.17 | 10.94 | 11.55 | 1.81 | 1.44 |
| MP016085 | 44 | OFLfv | 3.67 | 48.35 | 97.45 | 320.17 | 172.48 | 64.14 | 35.04 | 1999.69 | 20.05 | 33.96 | 4.85 | 4.85 |
| MP016086 | 45 | OFLfv | 6.35 | 41.39 | 157.17 | 261.34 | 817.60 | 68.62 | 27.01 | 1328.60 | 34.38 | 45.99 | 4.38 | 2.92 |
| MP016087 | 46 | OFLfv | 0.35 | 1.01 | 3.62 | 14.70 | 5.00 | 2.20 | 1.70 | 71.00 | 0.85 | 1.00 | 0.10 | 0.50 |
| MP016088 | 47 | OFLfv | 11.71 | 39.71 | 138.32 | 219.68 | 180.18 | 77.62 | 28.41 | 1108.80 | 29.11 | 38.12 | 3.47 | 6.93 |
| MP016089 | 48 | OFLfv | 0.16 | 0.60 | 1.79 | 6.50 | 3.00 | 1.00 | 0.60 | 35.00 | 0.38 | 0.80 | 0.05 | 0.30 |
| MP016090 | 49 | OFLfv | 8.41 | 11.70 | 59.19 | 86.43 | 38.61 | 26.14 | 16.04 | 763.29 | 10.37 | 19.90 | 1.19 | 15.15 |
| MP016091 | 50 | OFLfv | 2.21 | 18.98 | 42.39 | 167.47 | 64.67 | 29.88 | 15.39 | 606.56 | 8.99 | 20.29 | 2.45 | 0.22 |
| MP016068 | 51 | OFLfv | 3.11 | 39.48 | 56.79 | 275.02 | 163.38 | 72.35 | 33.45 | 1128.10 | 13.38 | 31.51 | 1.95 | 3.50 |
| MP016067 | 52 | OFLfv | 11.76 | 20.42 | 72.42 | 197.61 | 101.49 | 23.28 | 16.72 | 961.17 | 25.07 | 19.10 | 2.99 | 1.19 |
| MP016066 | 53 | OFLfv | 6.54 | 16.20 | 60.02 | 110.73 | 47.12 | 15.90 | 10.01 | 559.55 | 14.25 | 23.56 | 2.36 | 5.89 |
| MP016065 | 54 | OFLfv | 9.69 | 39.51 | 144.52 | 223.65 | 76.31 | 45.20 | 25.83 | 950.94 | 23.07 | 62.81 | 4.11 | 2.35 |
| MP016064 | 55 | OFLfv | 5.81 | 25.03 | 86.88 | 351.08 | 255.75 | 24.03 | 19.38 | 2038.25 | 30.46 | 22.48 | 2.33 | 0.78 |
| MP016063 | 56 | OFLfv | 11.87 | 28.07 | 103.16 | 248.18 | 236.06 | 68.90 | 33.18 | 1505.68 | 18.44 | 43.38 | 2.55 | 0.64 |
| MP016062 | 57 | Omi | 9.56 | 33.08 | 156.34 | 272.22 | 208.78 | 51.39 | 32.12 | 1292.83 | 22.48 | 70.66 | 2.41 | 0.80 |
| MP016061 | 58 | OFLfv | 5.46 | 37.74 | 138.57 | 316.78 | 155.02 | 45.16 | 24.26 | 1462.58 | 21.64 | 125.36 | 5.39 | 0.67 |
| MP016060 | 59 | OFLfv | 5.35 | 25.66 | 79.51 | 211.97 | 157.25 | 34.60 | 17.61 | 880.60 | 20.07 | 89.95 | 3.15 | 7.55 |
| MP016059 | 60 | OFLfv | 5.66 | 24.05 | 92.89 | 133.77 | 100.20 | 22.04 | 10.02 | 561.12 | 17.69 | 66.13 | 3.51 | 1.50 |
| MP016058 | 61 | OFLfv | 4.28 | 29.31 | 58.47 | 163.78 | 150.66 | 35.48 | 16.52 | 767.88 | 11.66 | 72.90 | 3.89 | 5.83 |
| MP016057 | 62 | OFLfv | 10.11 | 62.05 | 105.50 | 245.10 | 188.54 | 73.70 | 32.57 | 1679.72 | 25.62 | 142.26 | 5.14 | 6.86 |
| MP016056 | 63 | OFLfv | 6.07 | 33.48 | 110.61 | 212.79 | 396.18 | 38.34 | 18.53 | 1182.15 | 19.30 | 195.53 | 4.47 | 8.95 |
| MP016055 | 64 | OFLfv | 1.84 | 12.55 | 29.66 | 113.09 | 138.88 | 14.63 | 6.70 | 724.16 | 6.15 | 25.30 | 1.49 | 4.46 |
| MP016054 | 65 | OFLfv | 6.54 | 40.20 | 88.23 | 260.50 | 707.52 | 39.13 | 18.76 | 1061.28 | 17.96 | 306.59 | 3.75 | 6.43 |
| MP016053 | 66 | OFLfv | 10.26 | 32.32 | 134.32 | 643.55 | 1390.48 | 32.03 | 19.66 | 2227.68 | 28.83 | 291.93 | 6.55 | 1.46 |
| MP016052 | 67 | ONFif | 9.79 | 72.67 | 553.78 | 491.13 | 2801.92 | 42.19 | 20.70 | 1170.12 | 26.19 | 160.79 | 7.96 | 4.78 |
| MP016051 | 68 | ONFft | 7.91 | 24.12 | 149.86 | 377.61 | 204.29 | 36.25 | 17.13 | 962.14 | 20.23 | 96.87 | 3.30 | 4.61 |
| MP016050 | 69 | ONFft | 26.43 | 32.16 | 102.80 | 217.41 | 133.98 | 24.36 | 7.92 | 505.47 | 30.21 | 152.25 | 5.48 | 4.26 |
| MP016049 | 70 | ONFft | 5.90 | 52.97 | 89.12 | 292.58 | 689.12 | 65.99 | 29.20 | 1454.16 | 18.63 | 75.92 | 4.67 | 3.50 |

## Appendix 2. QPX B-horizon soil geochemistry, Transect 6000, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

| SAMPLEID | Order | Geology | Mo Q | Cu Q | Pb Q | Zn Q | Ag Q | Ni Q | Co Q | Mn Q | Fe Q | As Q | U Q | Au Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | NW to SE | | 0.01 | 0.01 | 0.01 | 0.10 | 2.00 | 0.10 | 0.10 | 1.00 | 0.01 | 0.10 | 0.10 | 0.20 |
| Unit | | | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | pct | ppm | ppm | ppb |
| MP016048 | 71 | ONFs | 3.23 | 25.28 | 50.31 | 188.55 | 241.31 | 30.27 | 15.95 | 805.73 | 10.35 | 23.31 | 2.86 | 7.77 |
| MP016047 | 72 | ONFft | 1.55 | 14.67 | 54.34 | 169.09 | 132.30 | 15.62 | 7.18 | 410.76 | 4.21 | 23.18 | 1.39 | 3.02 |
| MP016046 | 73 | ONFft | 4.07 | 27.72 | 126.77 | 453.68 | 979.44 | 30.03 | 22.64 | 4204.20 | 19.17 | 86.39 | 5.08 | 3.70 |
| MP016045 | 74 | ONFft | 2.90 | 37.39 | 37.64 | 84.55 | 51.24 | 15.98 | 10.13 | 437.98 | 5.14 | 44.53 | 1.95 | 4.27 |
| MP016044 | 75 | ONFft | 5.55 | 49.93 | 98.35 | 394.36 | 584.91 | 34.97 | 18.69 | 1109.52 | 21.53 | 77.18 | 3.62 | 29.55 |
| MP016043 | 76 | ONFs | 1.28 | 10.91 | 47.04 | 125.16 | 71.38 | 15.60 | 11.12 | 499.66 | 4.40 | 21.25 | 1.49 | 5.15 |
| MP016042 | 77 | ONFft | 3.73 | 41.01 | 161.66 | 430.68 | 454.10 | 35.37 | 27.25 | 1735.14 | 19.93 | 161.09 | 4.30 | 4.78 |
| MP016041 | 78 | ONFft | 3.44 | 24.64 | 96.32 | 196.80 | 84.00 | 26.00 | 18.00 | 736.00 | 11.80 | 78.80 | 2.80 | 6.00 |
| MP016013 | 79 | ONFft | 4.35 | 10.61 | 30.86 | 39.15 | 46.40 | 8.99 | 7.25 | 269.70 | 6.26 | 24.94 | 1.74 | 5.51 |
| MP016014 | 80 | ONFft | 7.17 | 42.73 | 117.54 | 162.69 | 621.52 | 26.96 | 15.08 | 685.50 | 17.50 | 116.54 | 4.57 | 3.66 |
| MP016015 | 81 | ONFft | 10.95 | 66.11 | 183.21 | 428.67 | 685.56 | 46.49 | 29.94 | 1615.40 | 33.49 | 159.96 | 5.52 | 0.79 |
| MP016016 | 82 | ONFft | 6.75 | 33.83 | 251.43 | 219.76 | 695.64 | 25.30 | 11.59 | 827.39 | 23.72 | 150.20 | 4.74 | 0.53 |
| MP016017 | 83 | ONFft | 6.48 | 33.93 | 117.10 | 241.15 | 681.36 | 32.73 | 20.04 | 1282.56 | 27.86 | 82.63 | 3.34 | 4.68 |
| MP016018 | 84 | ONFft | 4.66 | 22.95 | 58.09 | 127.20 | 561.80 | 21.73 | 11.66 | 901.00 | 19.40 | 130.38 | 3.18 | 1.59 |
| MP016019 | 85 | ONFft | 3.84 | 36.55 | 76.20 | 215.93 | 344.80 | 37.07 | 17.67 | 1017.16 | 13.49 | 78.01 | 3.45 | 0.43 |
| MP016020 | 86 | ONFft | 4.58 | 32.54 | 77.75 | 156.04 | 484.72 | 43.16 | 19.92 | 690.56 | 15.80 | 63.08 | 3.32 | 3.98 |
| MP016021 | 87 | OFLfv | 0.87 | 8.55 | 12.19 | 28.50 | 25.00 | 9.20 | 3.90 | 182.00 | 2.06 | 15.40 | 1.00 | 1.40 |
| MP016022 | 88 | OFLfv | 8.31 | 71.22 | 118.70 | 249.90 | 161.70 | 64.68 | 28.67 | 1183.35 | 24.99 | 109.52 | 5.88 | 1.47 |
| MP016023 | 89 | OFLfv | 1.90 | 4.82 | 26.10 | 20.60 | 28.00 | 3.60 | 3.50 | 280.00 | 1.85 | 34.80 | 0.30 | 1.40 |
| MP016024 | 90 | OFLfv | 14.36 | 57.93 | 312.04 | 218.95 | 413.25 | 31.90 | 15.95 | 1428.25 | 40.24 | 700.35 | 5.08 | 7.25 |
| MP016025 | 91 | OFLfv | 5.02 | 59.75 | 102.56 | 179.52 | 387.20 | 31.68 | 29.48 | 1738.00 | 18.44 | 134.64 | 4.40 | 7.48 |
| MP016026 | 92 | OFLfv | 1.50 | 15.73 | 27.27 | 84.74 | 34.20 | 18.81 | 9.12 | 321.10 | 6.23 | 21.47 | 1.90 | 3.42 |
| MP016027 | 93 | OLRBM | 4.58 | 33.04 | 79.42 | 308.74 | 536.67 | 31.96 | 19.30 | 2424.06 | 21.04 | 95.88 | 3.02 | 12.06 |
| MP016028 | 94 | OFLfv | 2.87 | 28.48 | 56.37 | 250.71 | 218.40 | 30.94 | 19.57 | 1951.95 | 14.51 | 52.33 | 3.19 | 5.46 |
| MP016029 | 95 | OTMs | 1.50 | 21.71 | 32.90 | 131.55 | 120.00 | 21.00 | 11.40 | 609.00 | 6.20 | 33.75 | 1.20 | 1.95 |
| MP016030 | 96 | OTMs | 2.37 | 19.15 | 48.80 | 83.94 | 100.04 | 15.86 | 7.81 | 385.52 | 9.56 | 37.82 | 1.95 | 3.17 |
| MP016031 | 97 | OTMs | 2.67 | 31.29 | 34.25 | 155.44 | 278.40 | 40.89 | 13.63 | 1189.00 | 7.66 | 31.32 | 2.03 | 4.06 |
| MP016032 | 98 | OTMs | 24.07 | 78.44 | 117.92 | 433.19 | 647.49 | 198.83 | 108.30 | 1633.05 | 23.49 | 151.85 | 12.61 | 9.74 |
| MP016033 | 99 | OTMs | 2.31 | 4.99 | 16.95 | 36.70 | 22.00 | 8.00 | 4.60 | 181.00 | 2.43 | 16.90 | 0.60 | 1.00 |
| MP016034 | 100 | OTMs | 3.22 | 13.37 | 47.65 | 107.30 | 145.00 | 14.21 | 6.67 | 284.20 | 12.12 | 42.63 | 2.03 | 4.06 |
| MP016035 | 101 | OTMs | 1.88 | 16.35 | 43.05 | 80.51 | 145.50 | 15.33 | 6.60 | 335.62 | 6.96 | 32.40 | 2.13 | 2.72 |
| MP016036 | 102 | OTMs | 1.20 | 10.07 | 15.20 | 35.72 | 26.60 | 13.30 | 5.32 | 283.10 | 5.81 | 12.73 | 2.09 | 4.75 |
| MP016037 | 103 | OTMs | 2.24 | 20.17 | 33.37 | 83.43 | 51.30 | 42.39 | 13.23 | 596.70 | 7.75 | 25.11 | 4.05 | 4.05 |
| MP016038 | 104 | OTMs | 3.13 | 18.30 | 26.22 | 108.66 | 90.30 | 43.95 | 16.86 | 602.00 | 8.67 | 27.69 | 3.01 | 4.52 |
| MP016039 | 105 | OTMs | 1.31 | 15.97 | 19.77 | 77.81 | 42.90 | 30.23 | 13.46 | 575.25 | 4.33 | 37.05 | 1.76 | 2.54 |
| MP016040 | 106 | OTMs | 4.01 | 58.12 | 69.94 | 738.47 | 601.20 | 84.17 | 31.56 | 946.89 | 25.50 | 1278.55 | 9.52 | 15.03 |
| MP016001 | 107 | OLRs | 4.56 | 101.84 | 86.76 | 571.52 | 528.96 | 111.87 | 49.25 | 2328.64 | 23.04 | 176.32 | 4.86 | 26.75 |
| MP016002 | 108 | OLRs | 0.18 | 2.46 | 5.04 | 10.10 | 5.00 | 2.90 | 1.10 | 41.00 | 0.66 | 2.60 | 0.10 | 0.50 |
| MP016003 | 109 | OLRs | 0.12 | 1.59 | 3.87 | 8.60 | 3.00 | 3.20 | 1.70 | 65.00 | 0.76 | 3.10 | 0.20 | 0.30 |
| MP016004 | 110 | OPBs | 1.28 | 20.77 | 27.69 | 79.46 | 48.09 | 25.19 | 8.47 | 423.65 | 6.50 | 20.84 | 2.29 | 10.08 |
| MP016005 | 111 | OPBs | 1.56 | 17.80 | 32.60 | 100.73 | 26.08 | 41.08 | 14.34 | 788.92 | 8.41 | 31.62 | 2.28 | 4.89 |
| MP016006 | 112 | OPBs | 0.40 | 4.40 | 7.54 | 23.80 | 61.00 | 6.70 | 3.80 | 127.00 | 2.05 | 5.60 | 0.70 | 0.60 |
| MP016007 | 113 | OPBs | 0.98 | 10.32 | 14.41 | 52.50 | 129.00 | 14.84 | 5.68 | 234.78 | 4.08 | 10.58 | 1.16 | 1.29 |
| MP016008 | 114 | OPBs | 0.20 | 2.05 | 4.17 | 17.20 | 8.00 | 3.30 | 2.00 | 125.00 | 1.13 | 2.20 | 0.30 | 1.00 |
| MP016009 | 115 | OPBs | 0.32 | 2.33 | 7.58 | 21.30 | 17.00 | 4.00 | 2.10 | 105.00 | 1.74 | 2.30 | 0.80 | 0.80 |
| MP016010 | 116 | OPBs | 0.24 | 2.76 | 9.50 | 18.20 | 31.00 | 4.00 | 2.00 | 144.00 | 2.03 | 3.20 | 0.50 | 4.20 |
| MP016011 | 117 | OPBs | 1.46 | 8.62 | 31.82 | 56.05 | 74.52 | 15.23 | 4.54 | 255.96 | 8.46 | 17.50 | 2.27 | 4.21 |
| MP016012 | 118 | OPBs | 0.74 | 5.25 | 18.88 | 30.72 | 38.40 | 6.40 | 2.88 | 132.80 | 4.82 | 10.08 | 0.98 | 13.60 |

# Appendix 2. QPX B-horizon soil geochemistry, Transect 6000, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

| SAMPLEID | Th Q | Sr Q | Cd Q | Sb Q | Bi Q | V Q | Ca Q | P Q | La Q | Cr Q | Mg Q | Ba Q | Ti Q | B Q | Al Q | Na Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.10 | 0.50 | 0.01 | 0.02 | 0.02 | 2.00 | 0.01 | 0.001 | 0.50 | 0.50 | 0.01 | 0.50 | 0.001 | 1.00 | 0.01 | 0.001 |
| Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | pct | ppm | ppm | pct | ppm | pct | ppm | pct | pct |
| MP016118 | 28.22 | 25.87 | 0.71 | 2.90 | 4.31 | 344.96 | 0.16 | 1.48 | 66.64 | 185.02 | 3.14 | 631.90 | 0.53 | 15.68 | 18.50 | 0.15 |
| MP016117 | 16.42 | 13.68 | 0.46 | 1.60 | 2.10 | 164.16 | 0.09 | 0.46 | 37.39 | 78.89 | 3.19 | 281.81 | 0.34 | 9.12 | 9.85 | 0.07 |
| MP016116 | 9.63 | 7.62 | 0.20 | 1.25 | 1.10 | 89.60 | 0.04 | 0.19 | 24.86 | 35.62 | 2.46 | 156.58 | 0.18 | 2.24 | 4.39 | 0.04 |
| MP016100 | 16.92 | 11.84 | 0.34 | 1.52 | 1.65 | 152.28 | 0.08 | 0.36 | 41.03 | 60.49 | 1.27 | 236.88 | 0.31 | 12.69 | 8.76 | 0.05 |
| MP016101 | 26.93 | 20.94 | 0.75 | 2.99 | 3.67 | 284.24 | 0.07 | 0.71 | 69.56 | 109.21 | 2.24 | 430.10 | 0.50 | 29.92 | 11.89 | 0.10 |
| MP016102 | 2.78 | 3.15 | 0.07 | 0.22 | 0.45 | 44.77 | 0.01 | 0.03 | 9.92 | 12.46 | 0.48 | 59.77 | 0.04 | 2.42 | 1.67 | 0.01 |
| MP016103 | 11.62 | 12.96 | 0.27 | 1.16 | 1.83 | 169.86 | 0.02 | 0.24 | 33.53 | 55.88 | 2.68 | 204.28 | 0.29 | 4.47 | 6.44 | 0.05 |
| MP016104 | 13.89 | 12.54 | 0.36 | 1.52 | 1.88 | 183.68 | 0.04 | 0.22 | 42.11 | 59.14 | 1.79 | 215.94 | 0.31 | 8.96 | 6.59 | 0.06 |
| MP016105 | 24.15 | 25.53 | 0.48 | 2.07 | 4.62 | 310.50 | 0.14 | 0.26 | 69.00 | 89.01 | 4.14 | 467.82 | 0.51 | 6.90 | 11.45 | 0.10 |
| MP016106 | 2.60 | 2.70 | 0.03 | 0.47 | 0.26 | 30.00 | 0.01 | 0.04 | 8.00 | 10.50 | 0.20 | 39.00 | 0.06 | 2.00 | 1.15 | 0.01 |
| MP016107 | 16.68 | 16.68 | 0.28 | 2.11 | 2.72 | 205.72 | 0.06 | 0.29 | 42.81 | 74.50 | 1.67 | 301.91 | 0.44 | 5.56 | 8.45 | 0.08 |
| MP016108 | 13.92 | 12.53 | 0.28 | 1.25 | 1.72 | 190.24 | 0.05 | 0.27 | 38.51 | 61.25 | 0.46 | 236.64 | 0.32 | 9.28 | 8.96 | 0.06 |
| MP016109 | 16.02 | 18.88 | 0.46 | 1.83 | 2.12 | 217.36 | 0.17 | 0.35 | 39.47 | 76.08 | 2.29 | 284.86 | 0.37 | 5.72 | 10.52 | 0.06 |
| MP016110 | 16.64 | 14.02 | 0.39 | 1.40 | 1.71 | 192.72 | 0.04 | 0.50 | 35.04 | 69.20 | 0.88 | 198.41 | 0.33 | 13.14 | 9.29 | 0.05 |
| MP016111 | 10.32 | 7.53 | 0.20 | 0.84 | 0.92 | 111.60 | 0.03 | 0.24 | 23.72 | 38.50 | 15.07 | 154.01 | 0.15 | 5.58 | 6.72 | 0.04 |
| MP016112 | 17.28 | 6.96 | 0.26 | 0.74 | 1.30 | 88.80 | 0.05 | 0.27 | 23.52 | 38.64 | 1.44 | 145.68 | 0.11 | 2.40 | 7.56 | 0.04 |
| MP016113 | 11.99 | 11.66 | 0.17 | 0.93 | 1.07 | 106.56 | 0.10 | 0.46 | 32.97 | 40.29 | 3.66 | 191.14 | 0.17 | 6.66 | 5.53 | 0.05 |
| MP016114 | 21.22 | 26.53 | 0.53 | 1.52 | 3.11 | 303.20 | 0.15 | 0.45 | 63.67 | 97.02 | 1.52 | 476.78 | 0.46 | 7.58 | 12.28 | 0.11 |
| MP016115 | 15.58 | 12.63 | 0.34 | 1.56 | 2.65 | 151.56 | 0.04 | 0.34 | 30.31 | 73.68 | 0.42 | 231.13 | 0.25 | 8.42 | 8.67 | 0.06 |
| MP016092 | 8.62 | 6.27 | 0.12 | 0.88 | 0.86 | 80.36 | 0.04 | 0.12 | 19.80 | 36.85 | 4.31 | 145.04 | 0.15 | 0.98 | 3.67 | 0.03 |
| MP016093 | 23.48 | 21.13 | 0.59 | 1.94 | 3.29 | 187.84 | 0.12 | 0.42 | 50.48 | 92.75 | 0.59 | 372.75 | 0.31 | 2.94 | 11.33 | 0.07 |
| MP016094 | 16.35 | 15.68 | 0.22 | 1.61 | 1.99 | 136.64 | 0.11 | 0.45 | 35.17 | 52.42 | 5.60 | 206.75 | 0.15 | 1.12 | 6.03 | 0.05 |
| MP016095 | 10.94 | 8.93 | 0.17 | 1.15 | 1.09 | 97.92 | 0.06 | 0.26 | 24.77 | 50.98 | 2.02 | 189.22 | 0.16 | 2.88 | 5.99 | 0.04 |
| MP016096 | 20.58 | 25.90 | 0.40 | 1.59 | 3.05 | 219.12 | 0.13 | 0.74 | 58.43 | 87.65 | 7.30 | 429.61 | 0.38 | 6.64 | 10.03 | 0.09 |
| MP016097 | 18.20 | 11.55 | 0.46 | 1.40 | 2.52 | 101.50 | 0.07 | 0.33 | 42.70 | 64.05 | 3.50 | 225.75 | 0.18 | 3.50 | 6.41 | 0.05 |
| MP016098 | 18.58 | 32.65 | 0.56 | 1.52 | 2.76 | 185.79 | 0.34 | 0.41 | 56.30 | 93.46 | 10.70 | 537.67 | 0.32 | 11.26 | 8.22 | 0.09 |
| MP016099 | 24.26 | 27.29 | 0.88 | 1.97 | 5.91 | 333.52 | 0.15 | 0.42 | 60.64 | 137.20 | 3.03 | 457.07 | 0.64 | 15.16 | 10.23 | 0.11 |
| MP016069 | 21.79 | 26.01 | 0.42 | 1.48 | 2.46 | 260.11 | 0.21 | 0.82 | 58.35 | 119.51 | 0.70 | 484.37 | 0.37 | 3.52 | 12.79 | 0.07 |
| MP016070 | 13.55 | 15.49 | 0.15 | 1.45 | 2.66 | 169.40 | 0.05 | 0.50 | 34.85 | 69.21 | 2.90 | 311.21 | 0.20 | 2.42 | 9.58 | 0.05 |
| MP016071 | 2.20 | 2.30 | 0.02 | 0.60 | 0.35 | 32.00 | 0.01 | 0.07 | 6.40 | 10.60 | 0.20 | 40.40 | 0.04 | 1.00 | 1.11 | 0.01 |
| MP016072 | 13.98 | 13.98 | 0.33 | 1.07 | 1.14 | 158.24 | 0.11 | 0.42 | 33.86 | 74.34 | 0.37 | 261.28 | 0.21 | 3.68 | 8.91 | 0.04 |
| MP016073 | 22.18 | 21.48 | 0.42 | 1.11 | 2.43 | 388.08 | 0.14 | 0.98 | 40.19 | 144.84 | 0.69 | 379.07 | 0.58 | 6.93 | 14.83 | 0.08 |
| MP016074 | 18.02 | 26.33 | 0.35 | 1.18 | 1.66 | 332.64 | 0.21 | 0.64 | 48.51 | 179.49 | 2.08 | 487.18 | 0.54 | 6.93 | 13.51 | 0.10 |
| MP016075 | 22.55 | 25.05 | 0.42 | 1.42 | 2.34 | 392.45 | 0.17 | 0.73 | 49.27 | 172.01 | 22.55 | 463.43 | 0.64 | 4.18 | 12.69 | 0.08 |
| MP016076 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| MP016077 | 24.88 | 31.90 | 0.38 | 0.89 | 3.51 | 293.48 | 0.32 | 0.39 | 57.42 | 111.65 | 11.48 | 507.85 | 0.53 | 3.19 | 12.50 | 0.10 |
| MP016078 | 24.49 | 34.76 | 0.40 | 1.34 | 2.37 | 387.10 | 0.40 | 1.93 | 60.04 | 215.67 | 11.85 | 486.64 | 0.61 | 3.95 | 13.98 | 0.10 |
| MP016079 | 11.25 | 19.79 | 0.16 | 0.66 | 0.81 | 194.00 | 0.12 | 0.56 | 24.83 | 133.47 | 8.92 | 270.05 | 0.31 | 1.94 | 8.61 | 0.05 |
| MP016080 | 14.18 | 17.34 | 0.20 | 0.91 | 1.02 | 197.00 | 0.12 | 0.48 | 29.94 | 113.47 | 4.73 | 275.41 | 0.29 | 3.94 | 8.59 | 0.06 |
| MP016081 | 19.32 | 28.15 | 0.33 | 0.88 | 1.32 | 253.92 | 0.28 | 0.81 | 33.67 | 178.85 | 2.21 | 409.03 | 0.50 | 2.76 | 12.64 | 0.08 |
| MP016082 | 20.93 | 18.75 | 0.31 | 1.00 | 1.22 | 300.84 | 0.13 | 0.64 | 40.11 | 167.86 | 3.49 | 303.46 | 0.48 | 2.18 | 12.95 | 0.07 |
| MP016083 | 16.83 | 23.89 | 0.11 | 0.81 | 1.14 | 222.63 | 0.11 | 0.47 | 35.84 | 172.67 | 1.63 | 401.28 | 0.41 | 2.72 | 9.94 | 0.07 |
| MP016084 | 11.91 | 17.33 | 0.14 | 0.61 | 0.61 | 205.77 | 0.14 | 0.57 | 27.08 | 136.82 | 1.44 | 258.12 | 0.29 | 3.61 | 8.74 | 0.06 |
| MP016085 | 24.79 | 22.10 | 0.49 | 1.29 | 1.29 | 339.57 | 0.16 | 1.13 | 36.65 | 242.01 | 4.85 | 328.25 | 0.65 | 5.39 | 15.95 | 0.09 |
| MP016086 | 22.63 | 37.96 | 0.51 | 1.02 | 2.41 | 481.80 | 0.15 | 0.55 | 46.72 | 200.02 | 2.92 | 419.75 | 0.98 | 3.65 | 13.29 | 0.09 |
| MP016087 | 0.70 | 0.50 | 0.01 | 0.04 | 0.04 | 12.00 | 0.01 | 0.01 | 1.60 | 5.10 | 0.50 | 24.10 | 0.05 | 0.50 | 0.55 | 0.00 |
| MP016088 | 22.18 | 25.64 | 0.49 | 1.18 | 2.43 | 547.47 | 0.03 | 0.31 | 40.89 | 235.62 | 6.93 | 367.29 | 0.97 | 3.47 | 14.07 | 0.09 |
| MP016089 | 0.60 | 0.25 | 0.01 | 0.03 | 0.02 | 2.00 | 0.01 | 0.01 | 2.20 | 2.60 | 0.30 | 10.00 | 0.02 | 0.50 | 0.22 | 0.00 |
| MP016090 | 7.13 | 11.88 | 0.09 | 0.56 | 0.71 | 210.87 | 0.06 | 0.10 | 16.93 | 101.87 | 15.15 | 155.93 | 0.56 | 2.97 | 5.70 | 0.03 |
| MP016091 | 13.38 | 9.61 | 0.29 | 0.62 | 0.65 | 156.10 | 0.07 | 0.27 | 18.51 | 101.24 | 0.22 | 157.88 | 0.31 | 1.12 | 8.21 | 0.03 |
| MP016068 | 15.17 | 19.45 | 0.23 | 0.89 | 0.86 | 210.06 | 0.19 | 0.33 | 27.23 | 153.66 | 3.50 | 289.03 | 0.38 | 1.95 | 9.34 | 0.05 |
| MP016067 | 21.49 | 11.94 | 0.24 | 0.78 | 1.19 | 334.32 | 0.12 | 0.33 | 37.61 | 105.07 | 1.19 | 257.90 | 1.00 | 2.99 | 16.12 | 0.04 |
| MP016066 | 15.90 | 14.73 | 0.18 | 0.94 | 1.24 | 282.72 | 0.06 | 0.36 | 40.64 | 75.39 | 5.89 | 135.47 | 0.50 | 2.95 | 7.83 | 0.05 |
| MP016065 | 23.48 | 21.72 | 0.35 | 1.53 | 2.11 | 399.16 | 0.12 | 0.33 | 71.03 | 156.73 | 2.35 | 280.00 | 0.93 | 5.87 | 11.68 | 0.06 |
| MP016064 | 20.15 | 27.90 | 0.39 | 1.32 | 1.63 | 372.00 | 0.31 | 0.78 | 48.05 | 94.55 | 0.78 | 406.10 | 1.26 | 7.75 | 9.84 | 0.07 |
| MP016063 | 17.86 | 38.28 | 0.45 | 0.96 | 1.91 | 280.72 | 0.32 | 0.32 | 52.95 | 141.00 | 0.64 | 560.16 | 0.90 | 6.38 | 9.25 | 0.08 |
| MP016062 | 20.08 | 54.60 | 0.40 | 1.61 | 1.85 | 441.65 | 1.12 | 0.35 | 47.38 | 157.39 | 0.80 | 428.80 | 1.19 | 4.02 | 7.31 | 0.07 |
| MP016061 | 34.37 | 30.33 | 0.61 | 2.02 | 2.02 | 330.26 | 0.20 | 0.75 | 66.05 | 184.00 | 0.67 | 366.66 | 0.71 | 13.48 | 14.09 | 0.08 |
| MP016060 | 22.64 | 27.05 | 0.44 | 1.64 | 2.14 | 314.50 | 0.06 | 0.27 | 51.58 | 128.95 | 7.55 | 271.73 | 0.53 | 6.29 | 11.26 | 0.08 |
| MP016059 | 24.05 | 19.04 | 0.40 | 1.35 | 1.75 | 250.50 | 0.05 | 0.27 | 43.59 | 118.24 | 1.50 | 231.46 | 0.40 | 5.01 | 13.63 | 0.07 |
| MP016058 | 28.19 | 21.87 | 0.29 | 1.22 | 1.31 | 184.68 | 0.05 | 0.22 | 67.55 | 111.29 | 5.83 | 347.49 | 0.18 | 9.72 | 9.57 | 0.09 |
| MP016057 | 31.71 | 42.85 | 0.26 | 2.23 | 2.23 | 299.95 | 0.17 | 0.34 | 102.84 | 169.69 | 6.86 | 644.46 | 0.47 | 8.57 | 11.83 | 0.15 |
| MP016056 | 33.23 | 31.31 | 0.45 | 1.98 | 2.49 | 287.55 | 0.06 | 0.55 | 87.54 | 139.94 | 8.95 | 421.74 | 0.29 | 6.39 | 12.40 | 0.11 |
| MP016055 | 9.92 | 14.14 | 0.10 | 0.42 | 0.50 | 89.28 | 0.02 | 0.20 | 32.24 | 44.64 | 4.46 | 213.03 | 0.07 | 2.48 | 5.33 | 0.06 |
| MP016054 | 27.34 | 26.26 | 0.21 | 4.29 | 1.07 | 225.12 | 0.05 | 0.53 | 56.28 | 105.59 | 6.43 | 426.66 | 0.24 | 5.36 | 10.77 | 0.10 |
| MP016053 | 40.04 | 36.40 | 1.09 | 2.62 | 3.13 | 414.96 | 0.15 | 0.98 | 86.63 | 143.42 | 1.46 | 579.49 | 0.55 | 14.56 | 16.09 | 0.15 |
| MP016052 | 35.82 | 46.96 | 0.72 | 2.31 | 4.94 | 246.76 | 0.40 | 0.58 | 109.05 | 136.12 | 4.78 | 545.26 | 0.33 | 7.96 | 12.18 | 0.17 |
| MP016051 | 20.43 | 36.25 | 0.46 | 1.12 | 2.24 | 197.70 | 0.40 | 0.36 | 65.24 | 120.60 | 4.61 | 405.29 | 0.29 | 13.18 | 10.94 | 0.12 |
| MP016050 | 24.97 | 37.76 | 0.67 | 1.83 | 3.47 | 328.86 | 0.18 | 0.35 | 70.64 | 117.54 | 4.26 | 358.09 | 0.40 | 6.09 | 10.72 | 0.11 |
| MP016049 | 30.37 | 32.70 | 0.35 | 2.16 | 1.58 | 210.24 | 0.06 | 0.57 | 70.66 | 144.25 | 3.50 | 467.20 | 0.25 | 11.68 | 12.44 | 0.14 |

## Appendix 2. QPX B-horizon soil geochemistry, Transect 6000, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

| SAMPLEID | Th Q | Sr Q | Cd Q | Sb Q | Bi Q | V Q | Ca Q | P Q | La Q | Cr Q | Mg Q | Ba Q | Ti Q | B Q | Al Q | Na Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.10 | 0.50 | 0.01 | 0.02 | 0.02 | 2.00 | 0.01 | 0.001 | 0.50 | 0.50 | 0.01 | 0.50 | 0.001 | 1.00 | 0.01 | 0.001 |
| Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | pct | ppm | ppm | pct | ppm | pct | ppm | pct | pct |
| MP016048 | 18.81 | 22.50 | 0.16 | 0.49 | 0.82 | 171.78 | 0.04 | 0.22 | 44.58 | 76.07 | 7.77 | 300.62 | 0.20 | 4.09 | 8.14 | 0.09 |
| MP016047 | 10.58 | 6.55 | 0.10 | 0.96 | 0.44 | 47.88 | 0.03 | 0.11 | 18.52 | 30.37 | 3.02 | 108.49 | 0.07 | 1.26 | 2.89 | 0.02 |
| MP016046 | 26.80 | 22.18 | 0.97 | 1.66 | 1.62 | 226.38 | 0.14 | 0.66 | 47.59 | 137.21 | 3.70 | 277.20 | 0.44 | 13.86 | 12.34 | 0.07 |
| MP016045 | 12.08 | 4.88 | 0.09 | 1.10 | 0.57 | 59.78 | 0.01 | 0.13 | 17.57 | 28.55 | 4.27 | 74.42 | 0.09 | 1.22 | 2.42 | 0.01 |
| MP016044 | 23.52 | 24.12 | 0.36 | 1.69 | 1.93 | 319.59 | 0.06 | 0.67 | 49.45 | 123.62 | 29.55 | 277.98 | 0.33 | 6.03 | 10.61 | 0.07 |
| MP016043 | 7.30 | 8.13 | 0.10 | 0.76 | 0.42 | 68.06 | 0.03 | 0.13 | 21.41 | 42.16 | 5.15 | 115.37 | 0.11 | 3.32 | 3.30 | 0.03 |
| MP016042 | 28.20 | 18.64 | 0.48 | 2.58 | 1.48 | 219.88 | 0.10 | 0.60 | 44.45 | 160.13 | 4.78 | 288.23 | 0.43 | 9.56 | 17.02 | 0.09 |
| MP016041 | 18.80 | 15.20 | 0.24 | 1.72 | 1.04 | 152.00 | 0.08 | 0.28 | 31.60 | 91.60 | 6.00 | 214.00 | 0.29 | 4.00 | 8.12 | 0.05 |
| MP016013 | 12.18 | 9.28 | 0.12 | 0.75 | 0.70 | 130.50 | 0.03 | 0.08 | 29.58 | 34.22 | 5.51 | 118.90 | 0.14 | 2.90 | 4.03 | 0.03 |
| MP016014 | 35.65 | 18.74 | 0.37 | 1.28 | 2.06 | 205.65 | 0.09 | 0.51 | 45.70 | 88.66 | 3.66 | 217.08 | 0.31 | 4.57 | 10.88 | 0.05 |
| MP016015 | 32.31 | 30.73 | 0.95 | 2.05 | 3.23 | 480.68 | 0.16 | 0.46 | 56.74 | 156.81 | 0.79 | 574.45 | 0.99 | 3.94 | 15.21 | 0.07 |
| MP016016 | 23.72 | 24.77 | 0.95 | 1.16 | 2.37 | 374.17 | 0.11 | 2.07 | 52.17 | 122.79 | 0.53 | 401.05 | 0.30 | 10.54 | 13.02 | 0.06 |
| MP016017 | 23.38 | 28.72 | 0.47 | 1.27 | 2.61 | 547.76 | 0.07 | 1.61 | 44.76 | 152.97 | 4.68 | 370.07 | 0.50 | 6.68 | 17.23 | 0.09 |
| MP016018 | 20.67 | 19.08 | 0.48 | 1.22 | 1.54 | 365.70 | 0.05 | 1.03 | 45.05 | 124.02 | 1.59 | 231.61 | 0.31 | 5.30 | 11.34 | 0.06 |
| MP016019 | 22.84 | 18.53 | 0.39 | 1.29 | 1.21 | 181.02 | 0.09 | 0.45 | 43.96 | 113.78 | 0.43 | 207.31 | 0.22 | 8.62 | 11.29 | 0.06 |
| MP016020 | 21.91 | 31.21 | 0.40 | 0.93 | 1.86 | 285.52 | 0.07 | 0.31 | 58.43 | 128.15 | 3.98 | 406.37 | 0.28 | 6.64 | 12.82 | 0.11 |
| MP016021 | 4.10 | 3.90 | 0.06 | 0.21 | 0.18 | 36.00 | 0.02 | 0.03 | 16.80 | 18.50 | 1.40 | 58.00 | 0.04 | 2.00 | 1.64 | 0.01 |
| MP016022 | 40.43 | 32.34 | 0.51 | 1.54 | 2.43 | 441.00 | 0.07 | 0.50 | 63.21 | 187.43 | 1.47 | 463.79 | 0.64 | 7.35 | 19.92 | 0.12 |
| MP016023 | 2.80 | 2.60 | 0.03 | 0.34 | 0.22 | 37.00 | 0.01 | 0.04 | 10.70 | 9.50 | 1.40 | 51.50 | 0.02 | 0.50 | 0.67 | 0.01 |
| MP016024 | 29.00 | 34.80 | 0.29 | 2.39 | 4.71 | 667.00 | 0.07 | 1.31 | 63.08 | 139.93 | 7.25 | 318.28 | 0.89 | 7.25 | 15.08 | 0.08 |
| MP016025 | 25.52 | 15.40 | 0.35 | 2.07 | 1.50 | 206.80 | 0.04 | 0.37 | 43.12 | 117.48 | 7.48 | 207.68 | 0.26 | 4.40 | 11.18 | 0.04 |
| MP016026 | 12.73 | 7.79 | 0.15 | 0.44 | 0.48 | 104.50 | 0.06 | 0.09 | 19.19 | 50.16 | 3.42 | 125.40 | 0.14 | 1.90 | 4.41 | 0.02 |
| MP016027 | 23.52 | 31.96 | 0.18 | 1.15 | 1.39 | 319.59 | 0.18 | 1.30 | 49.45 | 118.19 | 12.06 | 378.68 | 0.43 | 6.03 | 12.24 | 0.08 |
| MP016028 | 21.39 | 19.11 | 0.36 | 0.96 | 1.09 | 263.90 | 0.09 | 0.67 | 39.13 | 112.39 | 5.46 | 260.72 | 0.39 | 9.10 | 13.47 | 0.05 |
| MP016029 | 8.40 | 7.35 | 0.15 | 0.63 | 0.51 | 88.50 | 0.03 | 0.23 | 15.30 | 48.90 | 1.95 | 89.40 | 0.10 | 3.00 | 5.10 | 0.02 |
| MP016030 | 12.69 | 7.56 | 0.32 | 0.83 | 0.83 | 178.12 | 0.02 | 0.27 | 19.76 | 69.05 | 3.17 | 112.48 | 0.22 | 4.88 | 8.44 | 0.03 |
| MP016031 | 14.21 | 15.95 | 0.09 | 0.38 | 0.46 | 124.70 | 0.03 | 0.19 | 32.19 | 76.85 | 4.06 | 265.64 | 0.10 | 5.80 | 7.28 | 0.05 |
| MP016032 | 57.30 | 45.84 | 0.63 | 1.43 | 2.12 | 269.31 | 0.34 | 0.38 | 87.10 | 269.31 | 9.74 | 819.39 | 0.37 | 5.73 | 22.92 | 0.15 |
| MP016033 | 3.70 | 6.30 | 0.03 | 0.27 | 0.22 | 39.00 | 0.08 | 0.03 | 9.90 | 20.30 | 1.00 | 64.50 | 0.08 | 0.50 | 1.48 | 0.01 |
| MP016034 | 12.76 | 13.63 | 0.17 | 0.84 | 1.07 | 191.40 | 0.08 | 0.15 | 22.33 | 69.60 | 4.06 | 146.16 | 0.28 | 1.45 | 7.28 | 0.05 |
| MP016035 | 13.19 | 9.51 | 0.19 | 0.47 | 0.74 | 97.00 | 0.08 | 0.15 | 20.76 | 57.81 | 2.72 | 124.74 | 0.15 | 1.94 | 6.27 | 0.04 |
| MP016036 | 11.40 | 8.93 | 0.08 | 0.27 | 0.55 | 87.40 | 0.02 | 0.07 | 16.53 | 41.99 | 4.75 | 99.75 | 0.13 | 1.90 | 3.02 | 0.04 |
| MP016037 | 19.98 | 15.39 | 0.05 | 0.38 | 1.11 | 132.30 | 0.05 | 0.11 | 35.10 | 68.31 | 4.05 | 194.94 | 0.21 | 1.35 | 5.48 | 0.06 |
| MP016038 | 14.15 | 18.06 | 0.12 | 0.33 | 0.63 | 132.44 | 0.09 | 0.12 | 34.92 | 82.17 | 4.52 | 273.01 | 0.17 | 9.03 | 7.77 | 0.08 |
| MP016039 | 10.14 | 13.85 | 0.12 | 0.43 | 0.39 | 60.45 | 0.10 | 0.08 | 31.40 | 48.95 | 2.54 | 169.65 | 0.06 | 3.90 | 2.91 | 0.04 |
| MP016040 | 38.58 | 24.55 | 1.40 | 1.20 | 2.76 | 315.63 | 0.15 | 0.62 | 53.11 | 244.99 | 15.03 | 339.68 | 0.29 | 15.03 | 26.85 | 0.12 |
| MP016001 | 28.58 | 35.26 | 0.91 | 1.76 | 1.52 | 297.92 | 0.12 | 0.92 | 66.27 | 212.80 | 26.75 | 543.55 | 0.17 | 12.16 | 17.45 | 0.09 |
| MP016002 | 1.20 | 1.10 | 0.02 | 0.11 | 0.08 | 13.00 | 0.01 | 0.01 | 3.40 | 6.20 | 0.50 | 22.30 | 0.02 | 1.00 | 0.53 | 0.00 |
| MP016003 | 1.10 | 1.00 | 0.01 | 0.05 | 0.08 | 15.00 | 0.01 | 0.01 | 3.50 | 5.90 | 0.30 | 20.00 | 0.02 | 2.00 | 0.58 | 0.00 |
| MP016004 | 11.91 | 14.20 | 0.18 | 0.21 | 0.57 | 105.34 | 0.05 | 0.09 | 32.06 | 68.93 | 10.08 | 185.26 | 0.06 | 4.58 | 5.89 | 0.04 |
| MP016005 | 13.37 | 16.95 | 0.07 | 0.49 | 0.88 | 117.36 | 0.07 | 0.10 | 39.45 | 58.35 | 4.89 | 233.09 | 0.06 | 6.52 | 4.76 | 0.05 |
| MP016006 | 4.10 | 5.30 | 0.04 | 0.10 | 0.21 | 31.00 | 0.03 | 0.06 | 9.30 | 16.20 | 0.60 | 50.80 | 0.05 | 4.00 | 1.55 | 0.01 |
| MP016007 | 9.03 | 8.64 | 0.05 | 0.14 | 0.32 | 63.21 | 0.03 | 0.15 | 13.55 | 35.60 | 1.29 | 106.04 | 0.07 | 1.29 | 3.86 | 0.02 |
| MP016008 | 2.00 | 1.50 | 0.01 | 0.09 | 0.12 | 20.00 | 0.01 | 0.02 | 4.10 | 6.10 | 1.00 | 20.00 | 0.03 | 3.00 | 0.83 | 0.01 |
| MP016009 | 3.70 | 3.50 | 0.03 | 0.09 | 0.37 | 30.00 | 0.02 | 0.08 | 8.60 | 8.80 | 0.80 | 29.30 | 0.06 | 1.00 | 1.27 | 0.01 |
| MP016010 | 3.00 | 2.80 | 0.02 | 0.07 | 0.25 | 36.00 | 0.01 | 0.04 | 6.60 | 9.70 | 4.20 | 26.90 | 0.06 | 0.50 | 1.21 | 0.01 |
| MP016011 | 13.93 | 15.55 | 0.13 | 0.39 | 0.75 | 168.48 | 0.03 | 0.20 | 34.34 | 71.60 | 4.21 | 161.35 | 0.12 | 3.24 | 7.87 | 0.05 |
| MP016012 | 5.76 | 7.20 | 0.06 | 0.16 | 0.40 | 107.20 | 0.02 | 0.09 | 16.00 | 41.60 | 13.60 | 72.48 | 0.06 | 1.60 | 4.94 | 0.02 |

Appendix 2. QPX B-horizon soil geochemistry, Transect 6000, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

| SAMPLEID | K Q | W Q | Sc Q | Tl Q | S Q | Hg Q | Se Q | Te Q | Ga Q | Sn Q | Zr Q | In Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.01 | 0.20 | 0.10 | 0.02 | 0.01 | 5.00 | 0.10 | 0.02 | 0.10 | 0.10 | 0.10 | 0.02 |
| Unit | pct | ppm | ppm | ppm | pct | ppb | ppm | ppm | ppm | ppm | ppm | ppm |
| MP016118 | 3.84 | < .2 | 28.22 | 2.43 | 0.16 | < 5 | 1.57 | < .02 | 85.46 | 21.17 | 10.19 | 0.78 |
| MP016117 | 1.46 | < .2 | 12.77 | 0.91 | 0.02 | < 5 | 0.91 | < .02 | 31.46 | 9.12 | 18.70 | 0.46 |
| MP016116 | 0.99 | < .2 | 5.82 | 0.49 | 0.04 | < 5 | 0.67 | < .02 | 15.68 | 2.91 | 15.68 | 0.16 |
| MP016100 | 1.40 | < .2 | 14.38 | 0.68 | 0.13 | < 5 | 1.27 | < .02 | 29.19 | 8.88 | 45.68 | 0.38 |
| MP016101 | 2.77 | < .2 | 20.20 | 1.27 | 0.15 | < 5 | 2.99 | < .02 | 53.11 | 15.71 | 71.81 | 0.60 |
| MP016102 | 0.39 | < .2 | 2.66 | 0.22 | 0.01 | < 5 | 0.24 | < .02 | 7.50 | 2.30 | 7.87 | 0.05 |
| MP016103 | 1.03 | < .2 | 7.60 | 0.67 | 0.13 | < 5 | 0.89 | < .02 | 33.08 | 9.39 | 37.10 | 0.22 |
| MP016104 | 1.30 | < .2 | 10.30 | 0.76 | 0.04 | < 5 | 0.90 | < .02 | 37.63 | 11.65 | 36.74 | 0.31 |
| MP016105 | 3.45 | < .2 | 20.01 | 1.93 | 0.35 | < 5 | 1.38 | < .02 | 60.72 | 14.49 | 81.42 | 0.48 |
| MP016106 | 0.23 | < .2 | 1.70 | 0.19 | 0.01 | < 5 | 0.20 | < .02 | 5.40 | 1.30 | 9.20 | 0.05 |
| MP016107 | 1.67 | < .2 | 11.12 | 1.17 | 0.17 | 5.00 | 1.11 | < .02 | 33.36 | 8.34 | 65.61 | 0.33 |
| MP016108 | 1.16 | < .2 | 11.14 | 0.97 | 0.02 | < 5 | 1.39 | < .02 | 33.87 | 10.67 | 39.44 | 0.32 |
| MP016109 | 1.43 | < .2 | 11.44 | 0.80 | 0.03 | < 5 | 2.29 | < .02 | 37.75 | 11.44 | 46.90 | 0.40 |
| MP016110 | 0.92 | < .2 | 9.20 | 0.66 | 0.02 | 6.00 | 2.19 | < .02 | 34.16 | 10.07 | 42.49 | 0.31 |
| MP016111 | 0.73 | < .2 | 5.58 | 0.59 | 0.01 | < 5 | 0.84 | < .02 | 22.88 | 6.14 | 24.27 | 0.17 |
| MP016112 | 1.06 | < .2 | 6.24 | 0.48 | 0.07 | < 5 | 1.20 | < .02 | 25.44 | 7.68 | 21.36 | 0.19 |
| MP016113 | 1.07 | < .2 | 7.99 | 0.63 | 0.02 | < 5 | 1.00 | < .02 | 23.98 | 5.99 | 11.66 | 0.20 |
| MP016114 | 2.96 | < .2 | 16.68 | 1.97 | 0.08 | < 5 | 1.52 | < .02 | 62.91 | 17.43 | 54.58 | 0.45 |
| MP016115 | 1.14 | < .2 | 7.58 | 0.67 | 0.02 | < 5 | 1.68 | < .02 | 27.79 | 9.68 | 36.21 | 0.38 |
| MP016092 | 0.71 | < .2 | 5.29 | 0.49 | 0.06 | < 5 | 0.39 | < .02 | 12.94 | 4.90 | 18.82 | 0.16 |
| MP016093 | 2.17 | < .2 | 11.15 | 1.23 | 0.47 | < 5 | 2.35 | < .02 | 42.85 | 12.33 | 58.70 | 0.47 |
| MP016094 | 1.46 | < .2 | 8.51 | 0.94 | 0.13 | 5.00 | 0.45 | < .02 | 27.55 | 10.08 | 4.48 | 0.38 |
| MP016095 | 0.86 | < .2 | 6.62 | 0.60 | 0.01 | < 5 | 0.86 | < .02 | 15.84 | 6.05 | 19.58 | 0.23 |
| MP016096 | 1.99 | < .2 | 12.62 | 1.46 | 0.07 | < 5 | 1.33 | < .02 | 41.17 | 11.95 | 47.14 | 0.33 |
| MP016097 | 1.68 | < .2 | 8.40 | 0.63 | 0.18 | < 5 | 0.70 | < .02 | 23.80 | 7.70 | 31.15 | 0.32 |
| MP016098 | 1.97 | < .2 | 12.39 | 1.46 | 0.03 | < 5 | 1.13 | < .02 | 30.40 | 11.26 | 41.10 | 0.34 |
| MP016099 | 2.65 | < .2 | 12.89 | 1.52 | 0.30 | < 5 | 1.52 | < .02 | 63.67 | 13.64 | 62.91 | 0.45 |
| MP016069 | 1.97 | < .2 | 16.87 | 1.41 | 0.04 | < 5 | 1.41 | < .02 | 48.51 | 12.65 | 46.40 | 0.56 |
| MP016070 | 1.31 | < .2 | 10.16 | 1.06 | 0.10 | < 5 | 0.48 | < .02 | 32.91 | 8.23 | 37.27 | 0.44 |
| MP016071 | 0.15 | < .2 | 1.30 | 0.11 | 0.02 | < 5 | 0.40 | < .02 | 4.40 | 0.90 | 8.20 | 0.06 |
| MP016072 | 1.03 | < .2 | 9.94 | 0.59 | 0.02 | < 5 | 0.74 | < .02 | 26.50 | 5.52 | 24.29 | 0.26 |
| MP016073 | 1.80 | < .2 | 17.33 | 1.11 | 0.28 | 6.00 | 0.35 | < .02 | 63.06 | 12.47 | 47.12 | 0.42 |
| MP016074 | 1.87 | < .2 | 17.33 | 1.25 | 0.03 | < 5 | 0.35 | < .02 | 43.66 | 10.40 | 51.28 | 0.35 |
| MP016075 | 2.34 | < .2 | 16.70 | 1.25 | 0.25 | < 5 | 1.67 | < .02 | 56.78 | 10.86 | 75.15 | 0.33 |
| MP016076 | 0.00 | < .2 | 0.00 | 0.00 | 0.00 | < 5 | 0.00 | < .02 | 0.00 | 0.00 | 0.00 | 0.00 |
| MP016077 | 2.36 | < .2 | 21.05 | 1.85 | 0.03 | < 5 | 1.28 | < .02 | 51.04 | 11.48 | 70.82 | 0.45 |
| MP016078 | 2.92 | < .2 | 21.33 | 1.50 | 0.32 | 5.00 | 1.58 | < .02 | 71.10 | 12.64 | 15.01 | 0.40 |
| MP016079 | 0.97 | < .2 | 8.92 | 0.81 | 0.02 | < 5 | 0.39 | < .02 | 27.94 | 5.82 | 21.73 | 0.16 |
| MP016080 | 1.18 | < .2 | 11.03 | 0.83 | 0.02 | < 5 | 0.39 | < .02 | 35.85 | 9.06 | 24.43 | 0.24 |
| MP016081 | 1.44 | < .2 | 11.04 | 0.83 | 0.17 | < 5 | 0.55 | < .02 | 45.26 | 7.73 | 37.54 | 0.22 |
| MP016082 | 1.40 | < .2 | 15.26 | 0.74 | 0.09 | < 5 | 1.31 | < .02 | 45.78 | 9.16 | 27.47 | 0.26 |
| MP016083 | 1.52 | < .2 | 10.32 | 0.87 | 0.05 | < 5 | 0.54 | < .02 | 35.84 | 5.97 | 42.90 | 0.16 |
| MP016084 | 1.12 | < .2 | 9.75 | 0.61 | 0.02 | < 5 | 0.72 | < .02 | 30.32 | 6.14 | 15.16 | 0.14 |
| MP016085 | 1.51 | < .2 | 15.09 | 0.81 | 0.03 | < 5 | 1.08 | < .02 | 43.66 | 10.78 | 23.72 | 0.32 |
| MP016086 | 2.12 | < .2 | 15.33 | 1.17 | 0.29 | < 5 | 0.73 | < .02 | 75.92 | 11.68 | 50.37 | 0.37 |
| MP016087 | 0.16 | < .2 | 0.60 | 0.07 | 0.02 | < 5 | 0.05 | < .02 | 2.40 | 0.30 | 4.40 | 0.01 |
| MP016088 | 2.08 | < .2 | 13.86 | 0.90 | 0.42 | < 5 | 0.69 | < .02 | 80.39 | 14.55 | 54.05 | 0.35 |
| MP016089 | 0.04 | < .2 | 0.30 | 0.02 | 0.01 | 5.00 | 0.05 | < .02 | 0.90 | 0.10 | 3.10 | 0.01 |
| MP016090 | 0.62 | < .2 | 5.94 | 0.45 | 0.01 | < 5 | 0.15 | < .02 | 22.87 | 4.46 | 17.52 | 0.12 |
| MP016091 | 0.62 | < .2 | 7.14 | 0.20 | 0.22 | < 5 | 0.67 | < .02 | 26.54 | 5.35 | 20.52 | 0.16 |
| MP016068 | 1.13 | < .2 | 8.95 | 0.62 | 0.23 | < 5 | 0.78 | < .02 | 28.40 | 5.06 | 28.01 | 0.16 |
| MP016067 | 1.07 | < .2 | 20.90 | 0.66 | 0.30 | < 5 | 2.99 | < .02 | 72.83 | 16.72 | 57.91 | 0.54 |
| MP016066 | 0.88 | < .2 | 17.08 | 0.77 | 0.06 | < 5 | 0.29 | < .02 | 65.97 | 18.85 | 31.81 | 0.29 |
| MP016065 | 1.47 | < .2 | 16.44 | 0.82 | 0.18 | < 5 | 2.35 | < .02 | 65.74 | 14.68 | 48.13 | 0.41 |
| MP016064 | 1.63 | < .2 | 17.83 | 1.09 | 0.08 | < 5 | 1.55 | < .02 | 79.83 | 20.93 | 54.25 | 0.54 |
| MP016063 | 2.23 | < .2 | 14.04 | 0.89 | 0.26 | < 5 | 0.64 | < .02 | 48.49 | 9.57 | 37.00 | 0.19 |
| MP016062 | 2.01 | < .2 | 12.05 | 1.04 | 0.24 | < 5 | 0.80 | < .02 | 59.42 | 12.05 | 48.98 | 0.24 |
| MP016061 | 1.82 | < .2 | 18.20 | 0.81 | 0.03 | 8.00 | 2.02 | < .02 | 54.59 | 14.83 | 49.88 | 0.34 |
| MP016060 | 1.38 | < .2 | 11.95 | 1.26 | 0.03 | 8.00 | 1.89 | < .02 | 54.09 | 15.73 | 39.63 | 0.31 |
| MP016059 | 0.90 | < .2 | 11.52 | 0.65 | 0.03 | 6.00 | 2.00 | < .02 | 49.10 | 13.53 | 36.57 | 0.25 |
| MP016058 | 1.75 | < .2 | 13.61 | 0.92 | 0.02 | 7.00 | 1.46 | < .02 | 43.74 | 12.64 | 27.22 | 0.24 |
| MP016057 | 2.66 | < .2 | 14.57 | 1.54 | 0.04 | < 5 | 0.86 | < .02 | 57.42 | 13.71 | 49.71 | 0.34 |
| MP016056 | 2.24 | < .2 | 16.61 | 1.47 | 0.03 | < 5 | 1.92 | < .02 | 65.18 | 17.25 | 36.42 | 0.38 |
| MP016055 | 0.84 | < .2 | 5.21 | 0.60 | 0.01 | < 5 | 0.50 | < .02 | 22.32 | 5.70 | 10.17 | 0.10 |
| MP016054 | 1.72 | < .2 | 9.65 | 1.72 | 0.03 | < 5 | 1.61 | < .02 | 47.17 | 12.86 | 30.55 | 0.27 |
| MP016053 | 2.33 | < .2 | 19.66 | 1.60 | 0.04 | < 5 | 3.64 | < .02 | 92.46 | 29.12 | 32.03 | 0.44 |
| MP016052 | 3.02 | < .2 | 14.33 | 2.47 | 0.04 | 8.00 | 2.39 | < .02 | 65.27 | 21.49 | 42.19 | 0.64 |
| MP016051 | 1.71 | < .2 | 10.54 | 1.19 | 0.07 | < 5 | 1.32 | < .02 | 42.18 | 13.18 | 27.68 | 0.26 |
| MP016050 | 2.19 | < .2 | 12.79 | 1.10 | 0.37 | < 5 | 1.83 | < .02 | 84.04 | 24.97 | 29.84 | 0.43 |
| MP016049 | 2.16 | < .2 | 12.85 | 1.28 | 0.06 | 7.00 | 1.17 | < .02 | 47.89 | 11.10 | 38.54 | 0.23 |

## Appendix 2. QPX B-horizon soil geochemistry, Transect 6000, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

| SAMPLEID | K Q | W Q | Sc Q | Tl Q | S Q | Hg Q | Se Q | Te Q | Ga Q | Sn Q | Zr Q | In Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.01 | 0.20 | 0.10 | 0.02 | 0.01 | 5.00 | 0.10 | 0.02 | 0.10 | 0.10 | 0.10 | 0.02 |
| Unit | pct | ppm | ppm | ppm | pct | ppb | ppm | ppm | ppm | ppm | ppm | ppm |
| MP016048 | 1.43 | < .2 | 9.41 | 0.86 | 0.08 | < 5 | 0.41 | < .02 | 35.17 | 7.36 | 21.68 | 0.16 |
| MP016047 | 0.53 | < .2 | 3.28 | 0.26 | 0.04 | < 5 | 0.38 | < .02 | 11.21 | 2.52 | 8.69 | 0.09 |
| MP016046 | 1.16 | < .2 | 12.94 | 0.74 | 0.02 | < 5 | 2.77 | < .02 | 43.43 | 11.55 | 31.8S | 0.37 |
| MP016045 | 0.29 | < .2 | 2.93 | 0.17 | 0.04 | 6.00 | 0.49 | 0.02 | 8.42 | 1.83 | 9.64 | 0.05 |
| MP016044 | 1.21 | < .2 | 10.85 | 0.90 | 0.03 | < 5 | 2.41 | < .02 | 46.43 | 13.87 | 26.53 | 0.36 |
| MP016043 | 0.60 | < .2 | 4.65 | 0.42 | 0.01 | 6.00 | 0.33 | < .02 | 15.27 | 4.65 | 10.79 | 0.10 |
| MP016042 | 1.15 | < .2 | 13.38 | 1.05 | 0.02 | < 5 | 1.91 | 0.02 | 39.20 | 11.47 | 18.16 | 0.38 |
| MP016041 | 0.76 | < .2 | 8.00 | 0.68 | 0.02 | < 5 | 1.20 | < .02 | 25.20 | 6.40 | 29.20 | 0.16 |
| MP016013 | 0.61 | < .2 | 5.22 | 0.55 | 0.01 | < 5 | 0.29 | < .02 | 25.23 | 10.44 | 12.47 | 0.09 |
| MP016014 | 1.37 | < .2 | 8.68 | 0.59 | 0.18 | 5.00 | 1.83 | < .02 | 38.85 | 14.62 | 38.39 | 0.27 |
| MP016015 | 2.21 | < .2 | 14.18 | 1.26 | 0.47 | 6.00 | 1.58 | < .02 | 86.68 | 18.12 | 41.76 | 0.32 |
| MP016016 | 1.69 | < .2 | 11.59 | 0.74 | 0.05 | < 5 | 2.11 | < .02 | 66.40 | 15.81 | 22.66 | 0.26 |
| MP016017 | 1.80 | < .2 | 10.69 | 1.20 | 0.03 | < 5 | 2.67 | 0.02 | 98.20 | 16.03 | 30.73 | 0.27 |
| MP016018 | 1.48 | < .2 | 12.19 | 0.80 | 0.11 | 6.00 | 2.12 | < .02 | 66.25 | 19.61 | 19.08 | 0.21 |
| MP016019 | 1.21 | < .2 | 10.78 | 0.52 | 0.13 | < 5 | 2.16 | 0.02 | 34.48 | 10.78 | 24.14 | 0.22 |
| MP016020 | 1.86 | < .2 | 12.62 | 1.26 | 0.03 | 5.00 | 0.66 | < .02 | 54.45 | 18.59 | 25.90 | 0.20 |
| MP016021 | 0.30 | < .2 | 2.00 | 0.14 | 0.01 | < 5 | 0.20 | < .02 | 6.10 | 1.60 | 4.80 | 0.03 |
| MP016022 | 2.57 | < .2 | 17.64 | 1.40 | 0.37 | < 5 | 2.94 | < .02 | 84.53 | 18.38 | 46.31 | 0.37 |
| MP016023 | 0.25 | < .2 | 1.00 | 0.19 | 0.01 | < 5 | 0.20 | < .02 | 6.20 | 1.50 | 3.70 | 0.02 |
| MP016024 | 1.74 | < .2 | 13.05 | 1.81 | 0.29 | < 5 | 4.35 | 0.02 | 126.15 | 23.93 | 32.63 | 0.44 |
| MP016025 | 0.97 | < .2 | 8.36 | 0.70 | 0.04 | < 5 | 2.64 | < .02 | 25.96 | 7.48 | 32.12 | 0.26 |
| MP016026 | 0.55 | < .2 | 4.75 | 0.34 | 0.01 | < 5 | 0.57 | < .02 | 18.24 | 5.32 | 8.93 | 0.08 |
| MP016027 | 1.69 | < .2 | 12.06 | 1.39 | 0.30 | < 5 | 1.81 | < .02 | 71.15 | 14.47 | 18.09 | 0.30 |
| MP016028 | 1.00 | < .2 | 10.92 | 0.96 | 0.02 | < 5 | 2.28 | < .02 | 44.59 | 10.92 | 16.38 | 0.23 |
| MP016029 | 0.39 | < .2 | 4.50 | 0.23 | 0.09 | 8.00 | 0.90 | < .02 | 17.10 | 3.15 | 7.80 | 0.09 |
| MP016030 | 0.51 | < .2 | 6.59 | 0.39 | 0.05 | < 5 | 1.46 | < .02 | 32.70 | 8.30 | 12.44 | 0.20 |
| MP016031 | 1.36 | < .2 | 7.25 | 0.64 | 0.09 | < 5 | 1.16 | < .02 | 30.45 | 6.96 | 11.89 | 0.12 |
| MP016032 | 2.87 | < .2 | 25.21 | 1.32 | 0.03 | < 5 | 4.01 | < .02 | 65.32 | 19.48 | 43.55 | 0.46 |
| MP016033 | 0.24 | < .2 | 2.20 | 0.17 | 0.01 | < 5 | 0.10 | < .02 | 8.80 | 2.40 | 4.40 | 0.03 |
| MP016034 | 0.61 | < .2 | 6.67 | 0.49 | 0.15 | 6.00 | 0.87 | < .02 | 38.28 | 8.99 | 15.95 | 0.15 |
| MP016035 | 0.64 | < .2 | 6.40 | 0.35 | 0.01 | < 5 | 1.16 | < .02 | 23.67 | 6.98 | 11.83 | 0.12 |
| MP016036 | 0.48 | < .2 | 3.99 | 0.30 | 0.01 | < 5 | 0.19 | < .02 | 18.43 | 6.84 | 7.79 | 0.06 |
| MP016037 | 1.16 | < .2 | 8.10 | 0.59 | 0.16 | < 5 | 0.54 | < .02 | 45.09 | 11.61 | 13.23 | 0.11 |
| MP016038 | 1.02 | < .2 | 8.73 | 0.69 | 0.02 | < 5 | 0.60 | < .02 | 32.21 | 10.54 | 12.04 | 0.12 |
| MP016039 | 0.90 | < .2 | 5.46 | 0.37 | 0.06 | < 5 | 0.20 | < .02 | 14.04 | 3.51 | 11.31 | 0.06 |
| MP016040 | 1.60 | 0.30 | 23.05 | 0.85 | 0.45 | < 5 | 3.01 | 0.02 | 78.16 | 19.54 | 28.06 | 0.35 |
| MP016001 | 2.43 | < .2 | 17.63 | 1.03 | 0.36 | 5.00 | 3.04 | 0.02 | 60.19 | 11.55 | 25.54 | 0.30 |
| MP016002 | 0.09 | < .2 | 0.60 | 0.04 | 0.03 | < 5 | 0.10 | < .02 | 1.90 | 0.40 | 2.70 | 0.01 |
| MP016003 | 0.09 | < .2 | 0.70 | 0.05 | 0.01 | < 5 | 0.05 | < .02 | 2.70 | 0.80 | 1.70 | 0.01 |
| MP016004 | 1.08 | < .2 | 6.87 | 0.41 | 0.07 | 6.00 | 0.23 | < .02 | 20.38 | 4.35 | 7.79 | 0.11 |
| MP016005 | 1.17 | < .2 | 4.24 | 0.42 | 0.13 | < 5 | 0.16 | < .02 | 20.21 | 3.91 | 17.60 | 0.07 |
| MP016006 | 0.24 | < .2 | 1.60 | 0.14 | 0.01 | < 5 | 0.05 | < .02 | 7.60 | 2.00 | 3.20 | 0.03 |
| MP016007 | 0.53 | < .2 | 3.10 | 0.28 | 0.05 | < 5 | 0.26 | < .02 | 14.19 | 3.10 | 6.06 | 0.06 |
| MP016008 | 0.07 | < .2 | 0.60 | 0.06 | 0.01 | < 5 | 0.05 | < .02 | 4.30 | 1.20 | 2.30 | 0.01 |
| MP016009 | 0.20 | < .2 | 1.40 | 0.14 | 0.02 | 12.00 | 0.50 | < .02 | 13.30 | 3.50 | 3.30 | 0.04 |
| MP016010 | 0.10 | < .2 | 0.90 | 0.11 | 0.02 | < 5 | 0.10 | < .02 | 7.60 | 2.10 | 2.80 | 0.02 |
| MP016011 | 0.94 | < .2 | 8.10 | 0.62 | 0.10 | 5.00 | 0.32 | < .02 | 39.53 | 10.04 | 11.02 | 0.16 |
| MP016012 | 0.30 | < .2 | 4.32 | 0.26 | 0.01 | < 5 | 0.16 | < .02 | 18.56 | 4.64 | 4.80 | 0.06 |

## Appendix 3a. QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

| SAMPLEID | Mo Q | Cu Q | Pb Q | Zn Q | Ag Q | Ni Q | Co Q | Mn Q | Fe Q | As Q | U Q | Au Q | Th Q | Sr Q | Cd Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.01 | 0.01 | 0.01 | 0.10 | 2.00 | 0.10 | 0.10 | 1.00 | 0.01 | 0.10 | 0.10 | 0.20 | 0.10 | 0.50 | 0.01 |
| Unit | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | pct | ppm | ppm | ppb | ppm | ppm | ppm |
| **Line 1** | | | | | | | | | | | | | | | |
| MP027056 | 1.53 | 12.27 | 24.59 | 104.27 | 86.69 | 22.76 | 9.87 | 396.12 | 8.83 | 11.56 | 3.01 | 5.30 | 14.81 | 12.16 | 0.12 |
| MP027055 | 0.97 | 10.16 | 18.68 | 69.96 | 80.38 | 21.10 | 6.28 | 287.62 | 6.09 | 14.95 | 2.14 | 6.03 | 17.84 | 13.44 | 0.11 |
| MP027054 | 2.42 | 57.36 | 46.38 | 84.70 | 268.06 | 26.44 | 8.81 | 263.16 | 12.41 | 37.58 | 11.51 | 0.73 | 70.99 | 6.49 | 0.35 |
| MP027053 | 5.87 | 69.37 | 90.81 | 241.09 | 485.16 | 106.98 | 27.12 | 711.57 | 21.12 | 66.93 | 8.46 | 0.25 | 40.55 | 27.87 | 0.70 |
| MP027052 | 2.12 | 27.81 | 34.26 | 119.95 | 176.40 | 38.22 | 14.82 | 555.07 | 9.26 | 22.81 | 4.70 | 0.12 | 28.11 | 12.35 | 0.19 |
| MP027051 | 1.99 | 14.33 | 31.43 | 107.32 | 109.48 | 25.60 | 7.25 | 272.93 | 10.90 | 23.75 | 3.86 | 1.39 | 18.97 | 14.96 | 0.22 |
| MP027050 | 1.81 | 21.46 | 34.58 | 95.46 | 100.83 | 34.30 | 11.07 | 420.86 | 7.60 | 29.59 | 2.52 | 7.89 | 19.07 | 10.41 | 0.13 |
| MP027057 | 2.27 | 15.84 | 27.23 | 113.45 | 59.98 | 40.29 | 17.21 | 541.16 | 7.71 | 25.17 | 1.83 | 3.39 | 10.43 | 15.26 | 0.17 |
| MP027058 | 1.43 | 6.51 | 24.79 | 85.54 | 61.48 | 24.98 | 12.56 | 417.25 | 5.28 | 25.11 | 1.70 | 1.18 | 9.03 | 13.60 | 0.13 |
| MP027059 | 7.02 | 13.40 | 60.66 | 125.80 | 45.90 | 22.10 | 65.96 | 9028.70 | 7.43 | 125.80 | 3.06 | 13.94 | 10.71 | 40.97 | 0.27 |
| MP027060 | 1.07 | 6.55 | 11.63 | 48.89 | 34.92 | 17.34 | 4.66 | 211.85 | 3.93 | 15.83 | 0.93 | 5.59 | 5.24 | 7.68 | 0.06 |
| MP027061 | 2.52 | 33.08 | 36.25 | 160.95 | 300.85 | 51.95 | 18.08 | 578.69 | 10.28 | 76.28 | 3.12 | 5.43 | 20.71 | 18.91 | 0.35 |
| MP027062 | 1.00 | 11.94 | 22.31 | 142.52 | 216.06 | 21.74 | 10.39 | 794.99 | 6.00 | 21.33 | 1.25 | 2.35 | 7.89 | 8.31 | 0.12 |
| **Line 2** | | | | | | | | | | | | | | | |
| MP027049 | 3.62 | 12.85 | 19.77 | 42.00 | 35.83 | 55.12 | 117.10 | 487.90 | 16.25 | 38.75 | 4.46 | 9.48 | 19.52 | 24.53 | 0.25 |
| MP027048 | 1.98 | 15.33 | 21.39 | 75.40 | 17.63 | 24.60 | 86.71 | 86.25 | 7.81 | 17.71 | 4.14 | 1.04 | 17.83 | 11.16 | 0.09 |
| MP027047 | 1.89 | 11.07 | 20.64 | 89.70 | 20.77 | 38.72 | 168.28 | 196.98 | 12.51 | 35.27 | 3.75 | 2.25 | 20.45 | 22.32 | 0.34 |
| MP027046 | 1.41 | 15.48 | 23.87 | 83.10 | 21.64 | 33.37 | 116.17 | 294.98 | 7.52 | 19.43 | 2.38 | 2.38 | 11.60 | 16.50 | 0.17 |
| MP027045 | 0.97 | 8.90 | 18.38 | 66.60 | 8.90 | 18.38 | 66.60 | 85.00 | 4.09 | 16.80 | 1.20 | 6.60 | 7.00 | 8.50 | 0.09 |
| MP027044 | 0.26 | 1.99 | 7.03 | 18.60 | 1.99 | 7.03 | 18.60 | 51.00 | 0.70 | 3.40 | 0.60 | 5.90 | 4.90 | 5.50 | 0.07 |
| MP027043 | 2.24 | 13.33 | 26.86 | 82.00 | 19.62 | 39.54 | 120.70 | 229.63 | 8.13 | 51.52 | 2.80 | 3.68 | 14.28 | 17.96 | 0.18 |
| MP027042 | 1.22 | 12.23 | 21.58 | 82.00 | 13.92 | 24.56 | 93.32 | 56.90 | 5.52 | 21.28 | 1.93 | 5.12 | 10.01 | 10.70 | 0.10 |
| MP027041 | 2.87 | 11.14 | 22.63 | 121.00 | 27.60 | 56.08 | 299.84 | 463.39 | 13.60 | 63.19 | 3.96 | 4.71 | 21.56 | 25.77 | 0.47 |
| MP027040 | 2.12 | 26.35 | 38.33 | 149.50 | 26.72 | 38.87 | 151.59 | 75.04 | 5.42 | 39.24 | 2.23 | 0.10 | 13.08 | 16.22 | 0.42 |
| MP027039 | 6.46 | 16.33 | 110.73 | 505.30 | 24.41 | 165.54 | 755.42 | 236.21 | 7.67 | 164.00 | 5.98 | 1.79 | 16.59 | 29.15 | 2.68 |
| MP027038 | 4.46 | 14.34 | 72.57 | 449.10 | 28.97 | 146.59 | 907.18 | 222.20 | 9.39 | 111.30 | 4.24 | 1.01 | 17.78 | 59.79 | 1.13 |
| **Line 3** | | | | | | | | | | | | | | | |
| MP027006 | 1.68 | 9.84 | 28.88 | 84.07 | 293.30 | 17.57 | 7.41 | 325.25 | 8.41 | 24.97 | 2.18 | 10.89 | 14.81 | 11.62 | 0.13 |
| MP027005 | 2.72 | 20.36 | 44.06 | 164.92 | 130.73 | 33.86 | 12.57 | 492.74 | 9.10 | 35.67 | 3.02 | 14.41 | 14.58 | 17.10 | 0.23 |
| MP027004 | 1.93 | 23.62 | 46.60 | 309.44 | 341.00 | 52.53 | 12.28 | 548.56 | 13.81 | 35.37 | 3.39 | 3.39 | 18.85 | 25.63 | 0.68 |
| MP027003 | 1.67 | 21.47 | 40.47 | 325.92 | 256.89 | 38.77 | 9.30 | 420.79 | 12.10 | 27.58 | 3.94 | 5.83 | 18.75 | 25.69 | 0.52 |
| MP027002 | 3.59 | 112.75 | 64.38 | 530.11 | 1298.88 | 220.70 | 42.94 | 651.20 | 19.36 | 430.85 | 3.52 | 42.94 | 22.88 | 41.89 | 0.56 |
| MP027001 | 3.07 | 45.88 | 52.93 | 367.41 | 691.76 | 76.35 | 20.88 | 740.70 | 16.74 | 145.86 | 2.94 | 28.39 | 16.64 | 31.98 | 0.78 |
| MP027000 | 0.86 | 10.72 | 21.42 | 120.42 | 162.33 | 13.47 | 4.46 | 170.82 | 5.35 | 34.27 | 1.70 | 6.47 | 8.49 | 6.58 | 0.29 |
| MP027007 | 1.59 | 25.15 | 32.85 | 398.37 | 258.07 | 37.99 | 11.92 | 438.85 | 10.72 | 322.39 | 3.41 | 1.83 | 14.15 | 11.79 | 0.55 |
| MP027008 | 1.65 | 28.81 | 39.03 | 308.75 | 329.04 | 47.16 | 16.27 | 778.73 | 11.79 | 61.60 | 3.11 | 1.10 | 16.63 | 18.65 | 0.62 |
| MP027009 | 1.50 | 37.53 | 32.28 | 258.96 | 595.66 | 46.77 | 18.01 | 1055.44 | 9.61 | 57.67 | 2.84 | 1.11 | 17.06 | 15.17 | 0.51 |
| MP027010 | 2.26 | 27.22 | 46.04 | 345.01 | 418.95 | 46.01 | 20.87 | 1606.71 | 11.05 | 47.78 | 3.53 | 5.29 | 22.93 | 20.29 | 0.41 |
| MP027011 | 2.21 | 71.13 | 56.12 | 513.89 | 356.16 | 111.94 | 39.43 | 3004.46 | 14.07 | 123.38 | 3.31 | 0.76 | 23.40 | 44.52 | 0.89 |
| MP027012 | 3.42 | 37.44 | 81.72 | 248.28 | 192.42 | 59.59 | 27.00 | 818.52 | 12.58 | 117.03 | 3.02 | 0.86 | 20.10 | 13.50 | 0.34 |
| **Line 4** | | | | | | | | | | | | | | | |
| MP027019 | 4.11 | 44.33 | 45.14 | 455.84 | 122.10 | 135.42 | 33.67 | 891.70 | 3.75 | 18.80 | 2.30 | 9.20 | 11.00 | 9.50 | 0.13 |
| MP027018 | 1.01 | 15.60 | 30.35 | 113.10 | 107.35 | 33.26 | 11.34 | 618.41 | 10.02 | 41.91 | 4.64 | 0.12 | 18.82 | 15.64 | 0.34 |
| MP027017 | 1.39 | 15.60 | 28.94 | 194.83 | 464.11 | 24.24 | 7.76 | 392.83 | 23.04 | 1568.52 | 2.88 | 23.76 | 19.08 | 52.92 | 0.97 |
| MP027016 | 0.66 | 8.39 | 18.95 | 107.80 | 141.00 | 16.90 | 5.70 | 242.00 | 6.68 | 12.40 | 1.60 | 1.70 | 9.10 | 8.20 | 0.20 |
| MP027015 | 2.52 | 68.11 | 57.13 | 584.64 | 1022.40 | 191.16 | 39.24 | 1468.80 | 9.90 | 20.43 | 2.22 | 8.40 | 12.20 | 14.41 | 0.41 |
| MP027014 | 2.30 | 27.45 | 48.62 | 245.62 | 306.72 | 40.45 | 13.69 | 911.61 | 6.31 | 26.76 | 1.97 | 5.59 | 11.04 | 24.34 | 0.39 |
| MP027013 | 0.75 | 9.50 | 20.85 | 77.40 | 75.00 | 20.80 | 8.00 | 475.00 | 16.84 | 93.61 | 1.85 | 37.74 | 14.06 | 47.73 | 0.44 |
| MP027020 | 2.07 | 32.70 | 53.54 | 214.42 | 489.60 | 39.46 | 17.14 | 1088.64 | 10.74 | 55.87 | 5.33 | 2.59 | 32.40 | 17.28 | 0.45 |
| MP027021 | 0.96 | 17.64 | 32.53 | 122.49 | 172.55 | 28.36 | 12.26 | 543.31 | 7.77 | 149.73 | 2.71 | 2.42 | 14.26 | 14.69 | 0.31 |
| MP027022 | 3.91 | 70.24 | 65.45 | 294.04 | 738.99 | 109.61 | 25.77 | 1127.12 | 20.12 | 204.31 | 4.04 | 1.55 | 24.53 | 22.98 | 0.75 |
| MP027023 | 1.46 | 32.61 | 29.50 | 281.07 | 287.87 | 63.65 | 19.31 | 1240.87 | 7.53 | 40.23 | 1.79 | 7.33 | 11.98 | 13.77 | 0.38 |
| MP027024 | 1.28 | 26.54 | 24.35 | 169.48 | 180.64 | 64.81 | 18.72 | 764.17 | 7.28 | 40.95 | 1.86 | 2.08 | 12.92 | 20.25 | 0.21 |
| MP027025 | 0.11 | 1.48 | 9.82 | 10.80 | 26.00 | 2.40 | 0.70 | 52.00 | 0.25 | 2.20 | 0.40 | 4.10 | 3.70 | 3.90 | 0.07 |
| **Line 5** | | | | | | | | | | | | | | | |
| MP027027 | 1.13 | 15.54 | 36.49 | 300.05 | 104.34 | 34.26 | 21.01 | 738.84 | 8.18 | 17.20 | 2.54 | 1.27 | 12.69 | 18.47 | 0.16 |
| MP027026 | 2.15 | 13.60 | 75.05 | 148.38 | 106.90 | 23.96 | 102.27 | 12044.09 | 4.97 | 24.09 | 2.45 | 6.70 | 12.11 | 55.26 | 0.39 |
| MP027028 | 0.32 | 8.97 | 14.93 | 61.60 | 73.00 | 13.00 | 3.50 | 214.00 | 1.35 | 5.90 | 0.70 | 5.10 | 4.30 | 8.60 | 0.13 |
| MP027029 | 0.31 | 3.28 | 12.23 | 40.10 | 37.00 | 9.40 | 3.70 | 195.00 | 1.23 | 6.10 | 0.70 | 3.20 | 4.10 | 7.80 | 0.07 |
| MP027030 | 2.37 | 41.84 | 72.45 | 300.03 | 266.16 | 153.01 | 62.78 | 2953.58 | 10.31 | 202.21 | 9.34 | 2.92 | 35.92 | 74.17 | 1.21 |
| MP027031 | 2.06 | 28.33 | 44.95 | 169.32 | 116.86 | 71.31 | 45.55 | 3570.99 | 8.59 | 133.86 | 12.62 | 3.59 | 37.85 | 41.17 | 0.46 |
| MP027032 | 1.93 | 21.74 | 60.04 | 163.30 | 242.00 | 47.00 | 28.30 | 2322.00 | 5.21 | 71.10 | 6.40 | 0.50 | 22.00 | 78.00 | 0.63 |
| MP027033 | 4.78 | 42.15 | 86.80 | 353.00 | 415.07 | 111.57 | 105.29 | 11557.28 | 14.72 | 256.09 | 11.80 | 0.19 | 41.89 | 77.11 | 1.45 |
| MP027034 | 2.17 | 16.72 | 38.31 | 183.09 | 247.33 | 60.89 | 27.88 | 2245.86 | 6.37 | 51.35 | 6.71 | 0.10 | 23.48 | 41.40 | 0.32 |
| MP027035 | 1.65 | 12.76 | 51.11 | 128.59 | 134.53 | 42.30 | 26.91 | 3410.57 | 5.78 | 51.99 | 3.51 | 1.09 | 14.42 | 39.51 | 0.38 |
| MP027036 | 1.70 | 22.49 | 65.59 | 184.82 | 152.21 | 48.44 | 29.96 | 2627.40 | 5.87 | 54.96 | 3.38 | 0.12 | 13.05 | 99.90 | 0.70 |
| MP027037 | 2.90 | 41.61 | 75.50 | 256.34 | 393.12 | 97.09 | 32.70 | 2442.34 | 6.75 | 86.36 | 10.36 | 0.12 | 30.95 | 140.40 | 1.10 |

Appendix 3a. QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

| SAMPLEID | Mo Q | Cu Q | Pb Q | Zn Q | Ag Q | Ni Q | Co Q | Mn Q | Fe Q | As Q | U Q | Au Q | Th Q | Sr Q | Cd Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.01 | 0.01 | 0.01 | 0.10 | 2.00 | 0.10 | 0.10 | 1.00 | 0.01 | 0.10 | 0.10 | 0.20 | 0.10 | 0.50 | 0.01 |
| Unit | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | pct | ppm | ppm | ppb | ppm | ppm | ppm |
| **Line 6** | | | | | | | | | | | | | | | |
| MP027101 | 2.28 | 19.31 | 53.23 | 136.89 | 408.24 | 15.88 | 8.26 | 730.62 | 9.77 | 50.54 | 1.62 | 3.73 | 11.02 | 10.69 | 0.19 |
| MP027100 | 2.44 | 36.03 | 80.80 | 286.45 | 307.33 | 45.51 | 27.68 | 1182.38 | 13.63 | 82.58 | 2.82 | 1.17 | 17.83 | 16.42 | 0.49 |
| MP027099 | 1.65 | 13.48 | 38.72 | 99.91 | 303.66 | 11.01 | 6.03 | 540.09 | 7.32 | 36.62 | 1.16 | 2.20 | 8.58 | 7.07 | 0.14 |
| MP027098 | 1.36 | 12.17 | 23.74 | 78.62 | 265.59 | 14.98 | 6.32 | 328.77 | 5.19 | 22.70 | 1.17 | 0.59 | 6.67 | 9.01 | 0.14 |
| MP027097 | 2.40 | 26.14 | 32.12 | 186.49 | 224.99 | 41.37 | 14.95 | 623.63 | 8.40 | 41.98 | 1.81 | 3.32 | 11.93 | 11.48 | 0.24 |
| MP027096 | 4.34 | 46.09 | 63.55 | 247.87 | 462.27 | 64.66 | 28.36 | 1718.62 | 16.34 | 73.45 | 3.40 | 9.08 | 20.99 | 26.94 | 0.34 |
| MP027095 | 1.88 | 17.85 | 28.01 | 186.04 | 286.34 | 28.94 | 10.61 | 656.00 | 8.41 | 27.12 | 1.67 | 8.03 | 10.45 | 11.51 | 0.23 |
| MP027094 | 3.90 | 36.77 | 77.40 | 382.96 | 431.41 | 46.37 | 29.53 | 1301.15 | 17.14 | 76.59 | 4.38 | 9.69 | 25.61 | 22.84 | 0.32 |
| MP027093 | 4.08 | 33.50 | 77.72 | 277.41 | 912.00 | 31.11 | 24.76 | 2156.20 | 22.15 | 79.14 | 4.23 | 2.75 | 27.72 | 19.04 | 0.61 |
| MP027092 | 0.60 | 1.18 | 8.72 | 14.60 | 19.00 | 2.10 | 0.70 | 92.00 | 0.38 | 4.00 | 0.50 | 3.30 | 3.40 | 6.60 | 0.04 |
| MP027091 | 3.46 | 11.48 | 41.87 | 62.20 | 133.00 | 12.00 | 29.90 | 1557.00 | 3.08 | 28.00 | 1.60 | 3.40 | 4.40 | 13.80 | 0.27 |
| MP027090 | 1.20 | 1.69 | 7.73 | 22.10 | 23.00 | 1.80 | 0.80 | 183.00 | 0.29 | 2.60 | 0.40 | 2.90 | 2.80 | 8.50 | 0.09 |
| MP027089 | 0.59 | 2.68 | 16.82 | 28.10 | 62.00 | 6.30 | 2.50 | 127.00 | 0.73 | 3.70 | 1.30 | 1.20 | 5.90 | 10.20 | 0.11 |
| **Line 7** | | | | | | | | | | | | | | | |
| MP027075 | 1.56 | 17.97 | 35.66 | 119.74 | 217.84 | 16.81 | 9.36 | 884.51 | 6.94 | 29.53 | 1.61 | 8.19 | 10.53 | 10.09 | 0.16 |
| MP027074 | 2.81 | 72.91 | 37.60 | 90.93 | 952.32 | 31.03 | 9.22 | 523.78 | 12.99 | 38.86 | 4.61 | 1.23 | 32.41 | 11.52 | 0.29 |
| MP027073 | 1.60 | 15.25 | 29.20 | 101.48 | 247.86 | 21.72 | 8.46 | 1453.63 | 6.59 | 23.33 | 1.75 | 3.21 | 9.91 | 14.00 | 0.22 |
| MP027072 | 1.47 | 13.59 | 24.05 | 99.68 | 315.62 | 20.41 | 16.29 | 949.80 | 5.92 | 23.93 | 1.61 | 7.19 | 9.69 | 12.48 | 0.18 |
| MP027071 | 3.60 | 46.52 | 48.70 | 277.40 | 761.67 | 75.39 | 29.80 | 1833.07 | 13.97 | 61.75 | 4.09 | 4.09 | 26.69 | 21.43 | 0.31 |
| MP027070 | 1.21 | 9.50 | 18.26 | 76.51 | 86.66 | 18.32 | 7.55 | 602.91 | 4.82 | 16.71 | 1.11 | 9.78 | 6.69 | 8.91 | 0.07 |
| MP027069 | 4.92 | 13.00 | 23.76 | 72.70 | 167.00 | 27.80 | 12.00 | 327.00 | 5.30 | 21.30 | 1.40 | 3.00 | 7.60 | 10.20 | 0.14 |
| MP027068 | 0.54 | 6.79 | 11.24 | 58.50 | 47.00 | 22.30 | 6.80 | 360.00 | 3.00 | 10.20 | 0.90 | 2.70 | 5.50 | 4.90 | 0.05 |
| MP027067 | 0.24 | 1.94 | 10.78 | 24.00 | 62.00 | 3.60 | 1.80 | 134.00 | 0.63 | 3.40 | 0.50 | 5.30 | 3.60 | 6.10 | 0.06 |
| MP027066 | 7.68 | 25.11 | 75.11 | 189.73 | 419.04 | 38.41 | 18.04 | 675.12 | 18.27 | 76.24 | 3.20 | 2.62 | 17.75 | 24.15 | 0.26 |
| MP027065 | 0.90 | 3.00 | 20.29 | 20.20 | 97.00 | 4.10 | 2.40 | 179.00 | 0.58 | 4.30 | 1.10 | 1.30 | 4.30 | 11.60 | 0.15 |
| MP027064 | 2.96 | 4.43 | 32.31 | 48.79 | 74.10 | 11.86 | 6.38 | 548.34 | 5.29 | 23.48 | 0.91 | 10.03 | 6.61 | 7.75 | 0.07 |
| MP027063 | 1.16 | 7.40 | 32.82 | 52.90 | 94.22 | 7.94 | 3.63 | 227.47 | 6.21 | 10.23 | 1.35 | 1.35 | 7.54 | 7.81 | 0.09 |
| **Line 8** | | | | | | | | | | | | | | | |
| MP027076 | 3.66 | 19.95 | 50.49 | 130.48 | 240.28 | 18.44 | 10.62 | 536.45 | 20.56 | 64.26 | 2.51 | 16.76 | 13.13 | 16.76 | 0.25 |
| MP027077 | 2.08 | 9.00 | 18.96 | 67.44 | 108.04 | 11.13 | 5.89 | 443.63 | 6.29 | 27.17 | 1.31 | 21.94 | 8.35 | 9.82 | 0.13 |
| MP027078 | 4.08 | 19.58 | 33.90 | 180.23 | 320.82 | 29.72 | 12.50 | 613.34 | 11.51 | 40.34 | 2.12 | 12.97 | 13.21 | 16.28 | 0.19 |
| MP027079 | 2.05 | 26.42 | 28.18 | 115.96 | 385.73 | 39.18 | 12.74 | 538.57 | 6.71 | 33.84 | 1.82 | 4.97 | 11.52 | 9.95 | 0.19 |
| MP027080 | 2.50 | 26.32 | 37.68 | 257.42 | 957.67 | 53.83 | 20.89 | 791.27 | 12.68 | 40.07 | 2.89 | 0.85 | 16.30 | 24.11 | 0.41 |
| MP027081 | 1.54 | 32.97 | 27.12 | 128.45 | 192.95 | 54.37 | 17.38 | 609.75 | 6.79 | 34.96 | 2.13 | 1.49 | 15.14 | 10.77 | 0.27 |
| MP027082 | 1.72 | 18.71 | 24.40 | 119.39 | 163.59 | 30.14 | 9.76 | 419.02 | 6.36 | 28.84 | 1.44 | 8.61 | 10.19 | 10.91 | 0.23 |
| MP027083 | 2.45 | 27.58 | 33.49 | 133.74 | 353.32 | 52.41 | 18.10 | 630.72 | 8.61 | 39.57 | 1.90 | 13.58 | 15.77 | 12.85 | 0.28 |
| MP027084 | 15.23 | 67.03 | 133.30 | 432.78 | 1060.49 | 77.85 | 34.33 | 1130.99 | 29.70 | 118.31 | 7.05 | 10.11 | 34.33 | 34.94 | 0.83 |
| MP027085 | 10.00 | 54.02 | 107.52 | 359.81 | 435.65 | 60.99 | 29.69 | 1087.50 | 34.21 | 185.23 | 3.87 | 12.26 | 21.62 | 32.27 | 0.55 |
| MP027086 | 4.41 | 34.59 | 71.57 | 276.22 | 264.14 | 49.46 | 23.60 | 1340.37 | 14.47 | 80.09 | 3.09 | 33.16 | 19.39 | 17.14 | 0.37 |
| MP027087 | 1.97 | 16.42 | 26.70 | 186.08 | 336.00 | 28.64 | 10.88 | 705.60 | 7.87 | 34.56 | 1.60 | 8.96 | 9.60 | 12.64 | 0.21 |
| MP027088 | 1.87 | 13.55 | 43.02 | 114.07 | 374.66 | 13.10 | 6.85 | 319.83 | 11.53 | 31.98 | 2.44 | 6.40 | 13.86 | 8.22 | 0.32 |

## Appendix 3a. QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

| SAMPLEID | Sb Q | Bi Q | V Q | Ca Q | P Q | La Q | Cr Q | Mg Q | Ba Q | Ti Q | B Q | Al Q | Na Q | K Q | W Q | Sc Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.02 | 0.02 | 2.00 | 0.01 | 0.001 | 0.50 | 0.50 | 0.01 | 0.50 | 0.001 | 1.00 | 0.01 | 0.001 | 0.01 | 0.20 | 0.10 |
| Unit | ppm | ppm | ppm | ppm | pct | ppm | ppm | pct | ppm | pct | ppm | pct | pct | pct | ppm | ppm |
| **Line 1** | | | | | | | | | | | | | | | | |
| MP027056 | 0.26 | 0.71 | 143.28 | 0.06 | 0.19 | 23.00 | 63.09 | 0.54 | 137.74 | 0.17 | 6.02 | 7.68 | 0.04 | 0.67 | < .1 | 8.07 |
| MP027055 | 0.29 | 0.53 | 100.48 | 0.05 | 0.11 | 23.11 | 58.66 | 0.60 | 140.30 | 0.07 | 6.28 | 4.76 | 0.05 | 0.85 | < .1 | 7.79 |
| MP027054 | 0.39 | 1.48 | 184.82 | 0.07 | 0.34 | 54.10 | 134.88 | 0.55 | 95.96 | 0.17 | 9.79 | 21.21 | 0.04 | 0.51 | < .1 | 25.46 |
| MP027053 | 0.82 | 3.43 | 318.46 | 0.10 | 0.34 | 53.49 | 210.48 | 1.82 | 397.58 | 0.40 | 2.49 | 15.95 | 0.09 | 1.99 | < .1 | 23.39 |
| MP027052 | 0.39 | 0.96 | 152.88 | 0.06 | 0.18 | 29.05 | 84.55 | 0.89 | 167.23 | 0.19 | 3.53 | 9.24 | 0.05 | 0.79 | < .1 | 12.00 |
| MP027051 | 0.20 | 1.13 | 171.16 | 0.05 | 0.16 | 25.44 | 89.90 | 0.60 | 159.29 | 0.08 | 0.77 | 9.96 | 0.06 | 0.74 | < .1 | 12.18 |
| MP027050 | 0.37 | 0.62 | 129.33 | 0.05 | 0.09 | 24.99 | 72.23 | 1.03 | 164.51 | 0.09 | 3.29 | 6.23 | 0.04 | 0.88 | < .1 | 9.54 |
| MP027057 | 0.33 | 0.59 | 127.79 | 0.05 | 0.10 | 27.25 | 79.15 | 1.38 | 203.29 | 0.07 | 3.91 | 5.91 | 0.05 | 1.00 | < .1 | 8.87 |
| MP027058 | 0.12 | 0.64 | 104.64 | 0.08 | 0.06 | 18.97 | 58.99 | 0.93 | 161.28 | 0.03 | 0.65 | 5.43 | 0.04 | 0.76 | < .1 | 9.55 |
| MP027059 | 0.46 | 0.61 | 144.50 | 0.70 | 0.15 | 46.07 | 36.55 | 0.63 | 319.77 | 0.09 | 1.70 | 3.47 | 0.04 | 0.92 | < .1 | 8.33 |
| MP027060 | 0.20 | 0.41 | 76.82 | 0.03 | 0.03 | 14.55 | 38.41 | 0.50 | 92.77 | 0.06 | 1.16 | 2.70 | 0.03 | 0.57 | < .1 | 4.54 |
| MP027061 | 0.51 | 0.84 | 159.47 | 0.07 | 0.24 | 35.67 | 108.50 | 1.13 | 252.52 | 0.15 | 6.58 | 9.85 | 0.07 | 1.25 | < .1 | 12.99 |
| MP027062 | 0.35 | 0.50 | 92.80 | 0.08 | 0.19 | 21.88 | 55.26 | 0.69 | 136.15 | 0.05 | 0.69 | 4.61 | 0.03 | 0.68 | < .1 | 7.34 |
| **Line 2** | | | | | | | | | | | | | | | | |
| MP027049 | 0.42 | 1.59 | 270.44 | 0.14 | 0.19 | 42.38 | 161.98 | 1.67 | 242.56 | 0.17 | 1.39 | 12.52 | 0.08 | 1.42 | < .1 | 17.56 |
| MP027048 | 0.13 | 0.66 | 113.85 | 0.07 | 0.12 | 22.77 | 81.19 | 0.97 | 146.05 | 0.07 | 1.15 | 8.42 | 0.04 | 0.67 | < .1 | 11.16 |
| MP027047 | 0.17 | 1.16 | 180.10 | 0.09 | 0.42 | 34.14 | 116.69 | 0.96 | 228.50 | 0.08 | 3.75 | 11.42 | 0.07 | 1.26 | < .1 | 13.88 |
| MP027046 | 0.24 | 0.71 | 89.47 | 0.08 | 0.15 | 27.12 | 83.46 | 1.30 | 175.17 | 0.07 | 2.80 | 5.75 | 0.05 | 0.95 | < .1 | 7.97 |
| MP027045 | 0.16 | 0.44 | 79.00 | 0.05 | 0.06 | 19.80 | 42.90 | 0.81 | 103.40 | 0.05 | 4.00 | 3.10 | 0.03 | 0.70 | < .1 | 5.60 |
| MP027044 | 0.05 | 0.25 | 20.00 | 0.03 | 0.03 | 15.10 | 10.00 | 0.22 | 45.20 | 0.01 | 0.50 | 1.03 | 0.02 | 0.34 | < .1 | 1.90 |
| MP027043 | 0.46 | 0.94 | 126.59 | 0.07 | 0.20 | 34.89 | 69.63 | 0.78 | 172.67 | 0.15 | 4.42 | 6.61 | 0.04 | 0.91 | < .1 | 9.27 |
| MP027042 | 0.34 | 1.35 | 73.97 | 0.05 | 0.11 | 19.46 | 44.72 | 0.80 | 101.96 | 0.08 | 2.28 | 3.91 | 0.03 | 0.61 | < .1 | 5.80 |
| MP027041 | 0.82 | 1.56 | 195.76 | 0.12 | 0.28 | 46.59 | 119.69 | 1.46 | 292.40 | 0.21 | 2.48 | 10.80 | 0.07 | 1.41 | < .1 | 14.87 |
| MP027040 | 0.38 | 0.61 | 76.05 | 0.16 | 0.08 | 24.44 | 49.89 | 0.97 | 166.09 | 0.07 | 5.07 | 3.62 | 0.03 | 0.61 | < .1 | 5.48 |
| MP027039 | 0.85 | 1.05 | 95.68 | 0.69 | 0.26 | 64.73 | 63.24 | 1.45 | 342.95 | 0.12 | 2.99 | 5.32 | 0.03 | 0.63 | < .1 | 10.47 |
| MP027038 | 0.38 | 1.58 | 135.34 | 1.05 | 0.20 | 44.84 | 91.91 | 1.88 | 399.76 | 0.14 | 4.04 | 7.21 | 0.05 | 1.25 | < .1 | 11.51 |
| **Line 3** | | | | | | | | | | | | | | | | |
| MP027006 | 0.22 | 0.73 | 166.98 | 0.06 | 0.14 | 24.54 | 77.39 | 0.76 | 171.92 | 0.06 | 0.73 | 7.86 | 0.05 | 0.86 | < .1 | 13.07 |
| MP027005 | 0.74 | 1.06 | 130.73 | 0.08 | 0.14 | 30.67 | 68.21 | 0.89 | 170.78 | 0.15 | 0.84 | 6.20 | 0.04 | 1.01 | < .1 | 9.55 |
| MP027004 | 0.44 | 1.44 | 239.33 | 0.19 | 0.21 | 29.23 | 109.92 | 1.06 | 253.10 | 0.12 | 1.06 | 14.78 | 0.08 | 1.16 | < .1 | 14.61 |
| MP027003 | 0.33 | 1.15 | 178.09 | 0.22 | 0.22 | 22.38 | 88.89 | 0.55 | 148.77 | 0.14 | 3.15 | 12.86 | 0.05 | 0.65 | < .1 | 9.77 |
| MP027002 | 3.13 | 1.23 | 264.00 | 0.11 | 0.28 | 91.87 | 258.72 | 3.13 | 383.68 | 0.02 | 1.76 | 15.49 | 0.10 | 2.46 | < .1 | 26.75 |
| MP027001 | 1.89 | 1.34 | 238.20 | 0.13 | 0.23 | 62.98 | 154.01 | 1.70 | 273.77 | 0.06 | 1.63 | 9.79 | 0.08 | 1.79 | 0.10 | 18.27 |
| MP027000 | 0.38 | 0.66 | 112.47 | 0.07 | 0.10 | 13.79 | 42.55 | 0.32 | 86.68 | 0.04 | 1.06 | 5.67 | 0.03 | 0.44 | 0.20 | 7.32 |
| MP027007 | 0.84 | 1.64 | 162.44 | 0.08 | 0.26 | 15.59 | 81.22 | 0.58 | 132.44 | 0.11 | 0.66 | 10.96 | 0.04 | 0.58 | 0.30 | 9.96 |
| MP027008 | 0.64 | 1.35 | 188.28 | 0.09 | 0.71 | 25.77 | 96.34 | 0.93 | 222.83 | 0.08 | 0.91 | 10.18 | 0.06 | 1.15 | 0.10 | 12.61 |
| MP027009 | 0.49 | 0.92 | 153.26 | 0.09 | 0.31 | 28.44 | 78.84 | 0.96 | 192.29 | 0.11 | 1.58 | 7.74 | 0.05 | 0.82 | < .1 | 9.32 |
| MP027010 | 0.84 | 0.90 | 191.10 | 0.10 | 0.37 | 36.46 | 87.47 | 0.87 | 222.12 | 0.18 | 2.94 | 9.45 | 0.06 | 0.93 | < .1 | 12.05 |
| MP027011 | 1.20 | 1.20 | 185.71 | 0.33 | 0.38 | 49.35 | 167.14 | 2.49 | 478.27 | 0.08 | 5.09 | 12.95 | 0.09 | 1.78 | < .1 | 15.77 |
| MP027012 | 0.88 | 1.41 | 254.17 | 0.14 | 0.24 | 34.03 | 129.24 | 1.72 | 229.90 | 0.30 | 1.44 | 12.25 | 0.05 | 1.05 | < .1 | 16.80 |
| **Line 4** | | | | | | | | | | | | | | | | |
| MP027019 | 0.22 | 1.11 | 88.00 | 0.08 | 0.07 | 21.50 | 26.40 | 0.62 | 91.00 | 0.16 | 3.67 | 9.62 | 0.04 | 0.70 | 0.10 | 9.90 |
| MP027018 | 0.40 | 1.75 | 149.08 | 0.15 | 0.28 | 25.91 | 64.03 | 0.78 | 160.45 | 0.03 | 1.80 | 16.56 | 0.12 | 3.20 | 0.10 | 25.20 |
| MP027017 | 2.52 | 1.33 | 259.20 | 0.11 | 0.69 | 84.96 | 320.40 | 3.71 | 536.04 | 0.08 | 1.00 | 5.98 | 0.03 | 0.40 | < .1 | 4.50 |
| MP027016 | 0.16 | 0.69 | 122.00 | 0.05 | 0.24 | 12.90 | 43.40 | 0.29 | 75.40 | 0.10 | 1.58 | 7.70 | 0.04 | 0.71 | 0.10 | 7.29 |
| MP027015 | 0.36 | 0.76 | 133.06 | 0.11 | 0.37 | 19.17 | 69.54 | 0.55 | 138.12 | 0.08 | 3.02 | 4.26 | 0.05 | 1.04 | < .1 | 6.65 |
| MP027014 | 0.21 | 0.60 | 99.79 | 0.30 | 0.10 | 27.37 | 59.12 | 0.97 | 202.00 | 0.06 | 1.85 | 9.77 | 0.08 | 2.26 | < .1 | 19.24 |
| MP027013 | 1.92 | 1.04 | 262.70 | 0.52 | 0.20 | 61.79 | 204.98 | 2.59 | 308.58 | 0.11 | 5.00 | 4.04 | 0.03 | 0.52 | < .1 | 7.30 |
| MP027020 | 0.58 | 1.79 | 174.24 | 0.12 | 0.37 | 38.16 | 66.24 | 0.79 | 148.46 | 0.27 | 2.88 | 11.66 | 0.06 | 0.79 | 0.10 | 12.38 |
| MP027021 | 0.26 | 0.90 | 136.90 | 0.06 | 0.14 | 32.94 | 58.75 | 0.78 | 163.85 | 0.10 | 1.43 | 6.26 | 0.04 | 0.93 | < .1 | 8.84 |
| MP027022 | 2.30 | 1.61 | 270.14 | 0.09 | 0.60 | 51.85 | 173.88 | 1.99 | 276.35 | 0.15 | 1.55 | 12.67 | 0.07 | 1.68 | 0.10 | 16.46 |
| MP027023 | 0.98 | 0.63 | 98.34 | 0.05 | 0.17 | 29.32 | 80.46 | 1.02 | 191.14 | 0.04 | 0.89 | 6.35 | 0.04 | 0.88 | 0.10 | 9.12 |
| MP027024 | 0.50 | 0.45 | 90.87 | 0.14 | 0.14 | 29.34 | 76.31 | 1.15 | 202.87 | 0.06 | 4.38 | 5.79 | 0.04 | 0.83 | < .1 | 7.55 |
| MP027025 | 0.09 | 0.21 | 10.00 | 0.01 | 0.02 | 12.10 | 4.40 | 0.10 | 34.70 | 0.00 | 0.50 | 0.77 | 0.01 | 0.26 | < .1 | 1.60 |
| **Line 5** | | | | | | | | | | | | | | | | |
| MP027027 | 0.45 | 1.03 | 138.18 | 0.18 | 0.11 | 29.19 | 56.26 | 0.96 | 152.42 | 0.22 | 1.41 | 5.15 | 0.04 | 0.71 | < .1 | 8.88 |
| MP027026 | 0.28 | 0.94 | 130.09 | 1.04 | 0.19 | 35.68 | 40.96 | 0.62 | 274.86 | 0.05 | 0.64 | 3.75 | 0.05 | 0.80 | < .1 | 7.99 |
| MP027028 | 0.19 | 0.34 | 26.00 | 0.09 | 0.04 | 17.00 | 21.80 | 0.49 | 63.30 | 0.01 | 0.50 | 1.63 | 0.02 | 0.35 | < .1 | 2.90 |
| MP027029 | 0.20 | 0.31 | 27.00 | 0.05 | 0.04 | 17.20 | 20.40 | 0.50 | 61.60 | 0.01 | 0.50 | 1.59 | 0.02 | 0.44 | < .1 | 2.80 |
| MP027030 | 1.52 | 2.44 | 141.62 | 1.21 | 0.34 | 86.87 | 79.86 | 2.18 | 308.06 | 0.34 | 2.92 | 6.96 | 0.06 | 1.26 | 0.30 | 22.63 |
| MP027031 | 0.48 | 2.74 | 124.83 | 0.70 | 0.18 | 71.71 | 50.73 | 1.47 | 196.01 | 0.24 | 5.31 | 6.04 | 0.05 | 0.72 | < .1 | 16.60 |
| MP027032 | 0.40 | 1.67 | 85.00 | 1.50 | 0.32 | 44.40 | 41.00 | 0.87 | 209.30 | 0.17 | 7.00 | 5.16 | 0.03 | 0.54 | < .1 | 12.40 |
| MP027033 | 0.29 | 3.54 | 205.63 | 1.47 | 0.56 | 67.02 | 100.91 | 1.96 | 586.62 | 0.25 | 3.81 | 11.79 | 0.07 | 1.03 | < .1 | 23.23 |
| MP027034 | 0.28 | 1.97 | 113.18 | 0.69 | 0.28 | 41.92 | 67.07 | 1.33 | 255.50 | 0.13 | 3.14 | 6.26 | 0.05 | 0.75 | < .1 | 14.46 |
| MP027035 | 0.24 | 0.93 | 99.38 | 0.64 | 0.22 | 36.36 | 54.90 | 1.18 | 239.37 | 0.06 | 3.64 | 4.68 | 0.04 | 0.86 | < .1 | 8.97 |
| MP027036 | 0.37 | 1.06 | 101.47 | 1.57 | 0.17 | 36.12 | 59.31 | 1.37 | 251.14 | 0.06 | 4.83 | 4.96 | 0.04 | 0.91 | < .1 | 8.70 |
| MP027037 | 0.62 | 1.72 | 119.81 | 2.45 | 0.45 | 78.12 | 80.75 | 1.54 | 401.98 | 0.14 | 8.74 | 8.07 | 0.06 | 1.14 | < .1 | 19.09 |

Appendix 3a. QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

| SAMPLEID | Sb Q | Bi Q | V Q | Ca Q | P Q | La Q | Cr Q | Mg Q | Ba Q | Ti Q | B Q | Al Q | Na Q | K Q | W Q | Sc Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.02 | 0.02 | 2.00 | 0.01 | 0.001 | 0.50 | 0.50 | 0.01 | 0.50 | 0.001 | 1.00 | 0.01 | 0.001 | 0.01 | 0.20 | 0.10 |
| Unit | ppm | ppm | ppm | ppm | pct | ppm | ppm | pct | ppm | pct | ppm | pct | pct | pct | ppm | ppm |
| **Line 6** | | | | | | | | | | | | | | | | |
| MP027101 | 1.00 | 0.97 | 139.32 | 0.06 | 0.20 | 25.27 | 57.83 | 0.52 | 138.35 | 0.10 | 3.24 | 5.73 | 0.03 | 0.60 | < .1 | 7.13 |
| MP027100 | 1.22 | 1.27 | 178.30 | 0.14 | 0.46 | 36.36 | 98.19 | 1.17 | 270.26 | 0.14 | 4.69 | 8.96 | 0.04 | 0.96 | < .1 | 13.14 |
| MP027099 | 0.67 | 0.76 | 103.15 | 0.05 | 0.14 | 18.31 | 42.30 | 0.38 | 107.09 | 0.08 | 1.16 | 4.28 | 0.02 | 0.49 | < .1 | 5.22 |
| MP027098 | 0.34 | 0.40 | 80.73 | 0.04 | 0.10 | 20.48 | 49.26 | 0.63 | 135.72 | 0.02 | 1.17 | 4.07 | 0.03 | 0.68 | < .1 | 6.32 |
| MP027097 | 0.69 | 0.65 | 96.64 | 0.06 | 0.20 | 25.07 | 71.42 | 1.04 | 177.27 | 0.07 | 3.02 | 6.28 | 0.04 | 0.86 | < .1 | 7.55 |
| MP027096 | 1.28 | 1.33 | 181.50 | 0.14 | 0.25 | 48.78 | 130.46 | 2.01 | 365.56 | 0.19 | 5.67 | 9.70 | 0.09 | 1.73 | < .1 | 13.90 |
| MP027095 | 0.55 | 0.65 | 112.11 | 0.06 | 0.20 | 25.30 | 77.57 | 0.92 | 191.50 | 0.06 | 3.03 | 6.54 | 0.04 | 0.92 | < .1 | 8.64 |
| MP027094 | 1.11 | 1.50 | 193.79 | 0.21 | 0.48 | 39.45 | 125.04 | 1.06 | 290.45 | 0.26 | 4.61 | 15.23 | 0.06 | 0.99 | 0.10 | 15.46 |
| MP027093 | 1.27 | 1.84 | 272.96 | 0.15 | 0.71 | 29.62 | 122.94 | 0.61 | 240.17 | 0.35 | 4.23 | 16.50 | 0.05 | 0.93 | 0.20 | 15.45 |
| MP027092 | 0.14 | 0.21 | 18.00 | 0.04 | 0.03 | 14.20 | 5.10 | 0.12 | 58.20 | 0.01 | 1.00 | 0.86 | 0.02 | 0.37 | < .1 | 1.90 |
| MP027091 | 0.44 | 0.67 | 43.00 | 0.25 | 0.12 | 24.20 | 17.30 | 0.39 | 120.40 | 0.04 | 3.00 | 1.86 | 0.01 | 0.37 | < .1 | 3.40 |
| MP027090 | 0.11 | 0.16 | 17.00 | 0.21 | 0.03 | 11.30 | 4.40 | 0.10 | 64.80 | 0.01 | 2.00 | 0.86 | 0.01 | 0.28 | < .1 | 2.20 |
| MP027089 | 0.18 | 0.32 | 21.00 | 0.11 | 0.07 | 17.20 | 10.20 | 0.26 | 121.50 | 0.02 | 1.00 | 1.47 | 0.02 | 0.45 | < .1 | 3.40 |
| **Line 7** | | | | | | | | | | | | | | | | |
| MP027075 | 0.69 | 0.72 | 109.65 | 0.04 | 0.15 | 22.51 | 50.59 | 0.56 | 113.01 | 0.09 | 0.73 | 5.34 | 0.03 | 0.56 | < .1 | 7.89 |
| MP027074 | 0.41 | 0.78 | 141.31 | 0.06 | 0.23 | 47.62 | 134.09 | 1.03 | 200.14 | 0.07 | 3.07 | 14.79 | 0.06 | 0.97 | < .1 | 20.28 |
| MP027073 | 0.15 | 0.51 | 106.43 | 0.07 | 0.14 | 26.10 | 61.09 | 0.83 | 234.59 | 0.04 | 0.73 | 5.70 | 0.05 | 0.90 | < .1 | 8.89 |
| MP027072 | 0.19 | 0.40 | 107.16 | 0.04 | 0.12 | 30.53 | 58.13 | 0.76 | 171.46 | 0.06 | 0.73 | 5.37 | 0.04 | 0.91 | < .1 | 9.40 |
| MP027071 | 0.64 | 0.88 | 165.58 | 0.12 | 0.38 | 48.51 | 137.72 | 1.77 | 322.59 | 0.10 | 3.90 | 12.21 | 0.07 | 1.27 | < .1 | 14.61 |
| MP027070 | 0.14 | 0.37 | 81.71 | 0.06 | 0.10 | 19.19 | 40.98 | 0.59 | 127.27 | 0.02 | 0.62 | 3.58 | 0.03 | 0.63 | < .1 | 6.19 |
| MP027069 | 0.27 | 0.52 | 73.00 | 0.07 | 0.07 | 17.50 | 49.50 | 0.73 | 136.50 | 0.06 | 0.50 | 4.39 | 0.03 | 0.64 | < .1 | 6.80 |
| MP027068 | 0.15 | 0.30 | 41.00 | 0.03 | 0.03 | 18.20 | 36.70 | 0.98 | 75.90 | 0.04 | 0.50 | 2.38 | 0.02 | 0.40 | < .1 | 3.60 |
| MP027067 | 0.12 | 0.18 | 15.00 | 0.08 | 0.03 | 15.80 | 6.80 | 0.19 | 55.00 | 0.01 | 0.50 | 0.81 | 0.01 | 0.29 | < .1 | 1.80 |
| MP027066 | 0.79 | 1.63 | 264.81 | 0.23 | 0.24 | 38.41 | 120.18 | 1.28 | 273.83 | 0.31 | 2.91 | 11.03 | 0.06 | 1.13 | < .1 | 14.55 |
| MP027065 | 0.14 | 0.20 | 16.00 | 0.25 | 0.06 | 17.30 | 7.70 | 0.17 | 77.20 | 0.01 | 0.50 | 1.08 | 0.01 | 0.32 | < .1 | 2.70 |
| MP027064 | 0.22 | 0.48 | 101.46 | 0.08 | 0.05 | 20.86 | 27.70 | 0.63 | 131.44 | 0.05 | 1.14 | 2.84 | 0.03 | 0.82 | < .1 | 5.36 |
| MP027063 | 0.16 | 0.73 | 99.60 | 0.04 | 0.05 | 16.69 | 41.88 | 0.42 | 102.57 | 0.04 | 0.67 | 4.50 | 0.03 | 0.61 | < .1 | 6.60 |
| **Line 8** | | | | | | | | | | | | | | | | |
| MP027076 | 1.54 | 1.93 | 363.22 | 0.14 | 0.30 | 29.06 | 87.17 | 0.70 | 185.24 | 0.45 | 1.40 | 6.12 | 0.05 | 0.98 | < .1 | 10.34 |
| MP027077 | 0.44 | 0.64 | 132.60 | 0.05 | 0.23 | 21.44 | 43.54 | 0.46 | 140.78 | 0.05 | 0.82 | 3.81 | 0.04 | 0.75 | < .1 | 7.37 |
| MP027078 | 0.54 | 0.87 | 141.54 | 0.09 | 0.20 | 31.85 | 91.06 | 1.06 | 225.76 | 0.09 | 1.18 | 7.67 | 0.05 | 1.04 | < .1 | 10.14 |
| MP027079 | 0.57 | 0.46 | 78.85 | 0.06 | 0.13 | 22.08 | 64.41 | 0.98 | 142.28 | 0.05 | 1.21 | 5.25 | 0.03 | 0.64 | < .1 | 6.91 |
| MP027080 | 0.27 | 0.95 | 193.57 | 0.25 | 0.29 | 33.28 | 94.24 | 1.19 | 279.15 | 0.10 | 3.40 | 11.17 | 0.05 | 1.02 | < .1 | 12.57 |
| MP027081 | 0.36 | 0.65 | 90.61 | 0.06 | 0.12 | 27.93 | 63.85 | 1.11 | 178.98 | 0.06 | 0.53 | 4.77 | 0.04 | 0.75 | < .1 | 7.14 |
| MP027082 | 0.56 | 0.55 | 90.41 | 0.09 | 0.15 | 23.25 | 58.40 | 0.79 | 143.36 | 0.06 | 0.72 | 4.26 | 0.04 | 0.72 | < .1 | 6.31 |
| MP027083 | 0.83 | 0.63 | 105.12 | 0.09 | 0.15 | 28.47 | 80.59 | 1.26 | 196.37 | 0.09 | 1.46 | 6.79 | 0.04 | 0.91 | < .1 | 9.05 |
| MP027084 | 2.05 | 3.28 | 364.74 | 0.34 | 0.57 | 55.48 | 197.39 | 2.33 | 411.63 | 0.83 | 6.13 | 16.55 | 0.08 | 1.90 | 0.20 | 25.13 |
| MP027085 | 1.74 | 2.71 | 429.19 | 0.48 | 0.84 | 43.24 | 204.91 | 1.97 | 308.50 | 0.60 | 1.61 | 12.42 | 0.07 | 1.48 | 0.30 | 16.78 |
| MP027086 | 1.32 | 1.74 | 205.13 | 0.25 | 0.37 | 37.65 | 112.40 | 1.57 | 273.69 | 0.28 | 1.41 | 7.42 | 0.05 | 1.21 | < .1 | 12.65 |
| MP027087 | 0.58 | 0.61 | 124.80 | 0.11 | 0.16 | 20.32 | 80.16 | 0.93 | 176.96 | 0.07 | 1.60 | 6.74 | 0.04 | 0.80 | < .1 | 9.60 |
| MP027088 | 0.59 | 0.94 | 178.19 | 0.05 | 0.23 | 18.73 | 73.10 | 0.40 | 103.87 | 0.20 | 3.05 | 9.28 | 0.03 | 0.52 | < .1 | 9.29 |

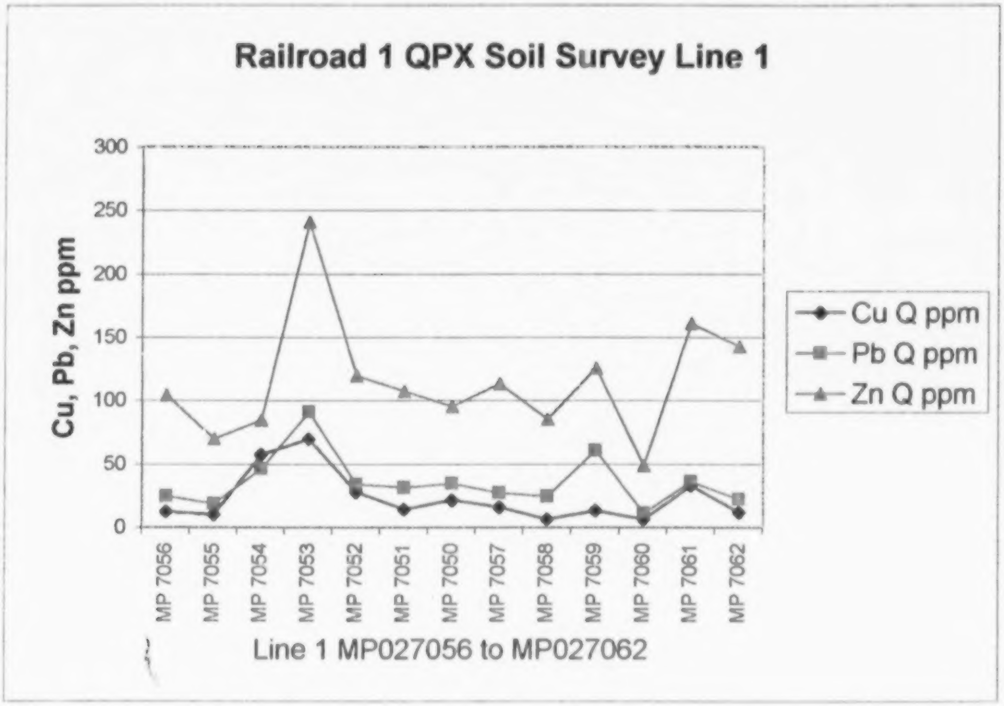
Appendix 3a. QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

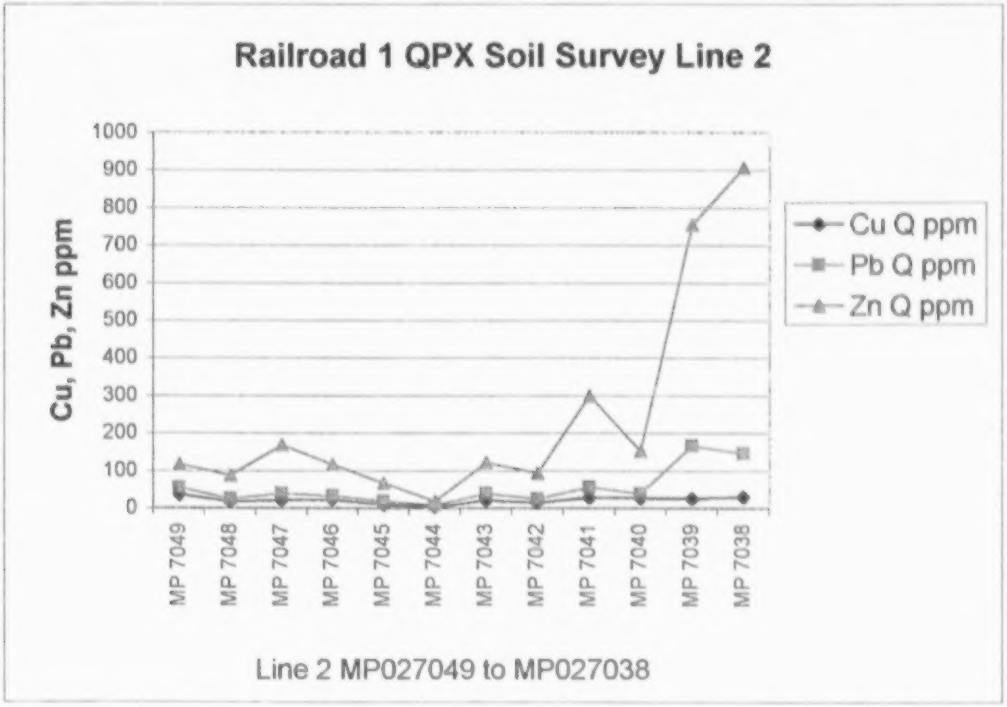
| SAMPLEID | Tl Q | S Q | Hg Q | Se Q | Te Q | Ga Q |
|---|---|---|---|---|---|---|
| Det. Limit | 0.02 | 0.01 | 5.00 | 0.10 | 0.02 | 0.10 |
| Unit | ppm | pct | ppb | ppm | ppm | ppm |
| **Line 1** | | | | | | |
| MP027056 | 0.37 | 0.11 | < 5 | 0.72 | < .02 | 38.65 |
| MP027055 | 0.45 | 0.06 | < 5 | 0.38 | < .02 | 22.61 |
| MP027054 | 0.15 | 0.27 | < 5 | 3.43 | < .02 | 40.15 |
| MP027053 | 0.60 | 0.22 | < 5 | 1.74 | 0.02 | 99.27 |
| MP027052 | 0.36 | 0.08 | < 5 | 0.59 | < .02 | 35.52 |
| MP027051 | 0.37 | 0.12 | < 5 | 0.77 | < .02 | 44.56 |
| MP027050 | 0.49 | 0.09 | < 5 | 0.66 | < .02 | 23.78 |
| MP027057 | 0.44 | 0.05 | < 5 | 0.39 | 0.02 | 22.30 |
| MP027058 | 0.39 | 0.05 | < 5 | 0.39 | < .02 | 26.16 |
| MP027059 | 0.61 | 0.22 | < 5 | 0.51 | 0.02 | 26.86 |
| MP027060 | 0.33 | 0.06 | < 5 | 0.23 | < .02 | 16.65 |
| MP027061 | 0.49 | 0.13 | < 5 | 0.99 | < .02 | 32.72 |
| MP027062 | 0.35 | 0.04 | < 5 | 0.28 | 0.02 | 18.97 |
| **Line 2** | | | | | | |
| MP027049 | 0.64 | 0.18 | < 5 | 0.81 | < .02 | 30.10 |
| MP027048 | 0.32 | 0.17 | < 5 | 1.12 | < .02 | 52.14 |
| MP027047 | 0.45 | 0.08 | < 5 | 0.46 | < .02 | 22.66 |
| MP027046 | 0.34 | 0.11 | < 5 | 1.13 | 0.02 | 49.90 |
| MP027045 | 0.37 | 0.10 | < 5 | 0.42 | < .02 | 22.79 |
| MP027044 | 0.18 | 0.04 | < 5 | 0.30 | < .02 | 16.30 |
| MP027043 | 0.43 | 0.01 | < 5 | 0.05 | < .02 | 5.90 |
| MP027042 | 0.38 | 0.06 | < 5 | 0.88 | 0.02 | 30.18 |
| MP027041 | 0.52 | 0.03 | < 5 | 0.34 | < .02 | 20.48 |
| MP027040 | 0.15 | 0.12 | < 5 | 1.24 | < .02 | 44.36 |
| MP027039 | 0.27 | 0.05 | < 5 | 0.30 | < .02 | 13.18 |
| MP027038 | 0.36 | 0.18 | < 5 | 1.20 | 0.03 | 16.89 |
| **Line 3** | | | | | | |
| MP027006 | 0.51 | 0.07 | < 5 | 0.58 | < .02 | 30.78 |
| MP027005 | 0.49 | 0.07 | < 5 | 0.67 | 0.02 | 28.83 |
| MP027004 | 0.30 | 0.13 | < 5 | 0.85 | < .02 | 55.28 |
| MP027003 | 0.22 | 0.11 | < 5 | 0.79 | < .02 | 41.29 |
| MP027002 | 1.09 | 0.14 | < 5 | 1.06 | 0.05 | 45.41 |
| MP027001 | 0.78 | 0.16 | < 5 | 0.98 | 0.04 | 41.44 |
| MP027000 | 0.25 | 0.05 | < 5 | 0.42 | 0.02 | 22.92 |
| MP027007 | 0.20 | 0.09 | < 5 | 1.05 | 0.04 | 32.10 |
| MP027008 | 0.35 | 0.05 | < 5 | 0.73 | 0.03 | 35.65 |
| MP027009 | 0.27 | 0.05 | < 5 | 0.79 | < .02 | 28.44 |
| MP027010 | 0.51 | 0.09 | < 5 | 0.88 | < .02 | 37.49 |
| MP027011 | 0.36 | 0.10 | < 5 | 0.76 | < .02 | 33.84 |
| MP027012 | 0.33 | 0.06 | < 5 | 1.01 | 0.03 | 36.62 |
| **Line 4** | | | | | | |
| MP027019 | 0.20 | 0.01 | < 5 | 0.50 | < .02 | 24.90 |
| MP027018 | 1.15 | 0.07 | < 5 | 1.34 | 0.02 | 36.17 |
| MP027017 | 0.12 | 0.07 | < 5 | 1.08 | 0.03 | 52.20 |
| MP027016 | 0.24 | 0.04 | < 5 | 0.40 | < .02 | 32.00 |
| MP027015 | 0.32 | 0.06 | < 5 | 0.79 | 0.02 | 29.15 |
| MP027014 | 0.81 | 0.03 | < 5 | 0.30 | < .02 | 21.77 |
| MP027013 | 0.35 | 0.07 | < 5 | 0.74 | 0.02 | 46.62 |
| MP027020 | 0.26 | 0.07 | < 5 | 1.87 | 0.02 | 40.61 |
| MP027021 | 0.39 | 0.03 | < 5 | 0.57 | < .02 | 40.21 |
| MP027022 | 0.75 | 0.12 | < 5 | 1.86 | 0.04 | 50.30 |
| MP027023 | 0.50 | 0.04 | < 5 | 0.72 | 0.03 | 21.99 |
| MP027024 | 0.32 | 0.02 | < 5 | 0.44 | 0.02 | 16.75 |
| MP027025 | 0.13 | 0.01 | < 5 | 0.05 | < .02 | 5.20 |
| **Line 5** | | | | | | |
| MP027027 | 0.44 | 0.04 | < 5 | 0.28 | 0.02 | 33.14 |
| MP027026 | 0.49 | 0.06 | < 5 | 0.52 | 0.02 | 23.70 |
| MP027028 | 0.16 | 0.01 | < 5 | 0.05 | < .02 | 7.10 |
| MP027029 | 0.30 | 0.01 | < 5 | 0.05 | < .02 | 6.70 |
| MP027030 | 0.54 | 0.15 | < 5 | 1.02 | < .02 | 32.56 |
| MP027031 | 0.44 | 0.08 | < 5 | 0.53 | 0.02 | 24.57 |
| MP027032 | 0.16 | 0.28 | < 5 | 1.20 | 0.05 | 24.00 |
| MP027033 | 0.30 | 0.29 | < 5 | 0.95 | < .02 | 51.98 |
| MP027034 | 0.23 | 0.09 | < 5 | 0.63 | < .02 | 29.34 |
| MP027035 | 0.30 | 0.13 | < 5 | 0.36 | < .02 | 20.85 |
| MP027036 | 0.19 | 0.13 | < 5 | 0.72 | 0.02 | 20.66 |
| MP027037 | 0.19 | 0.29 | < 5 | 1.62 | 0.03 | 31.70 |

# Appendix 3a. QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

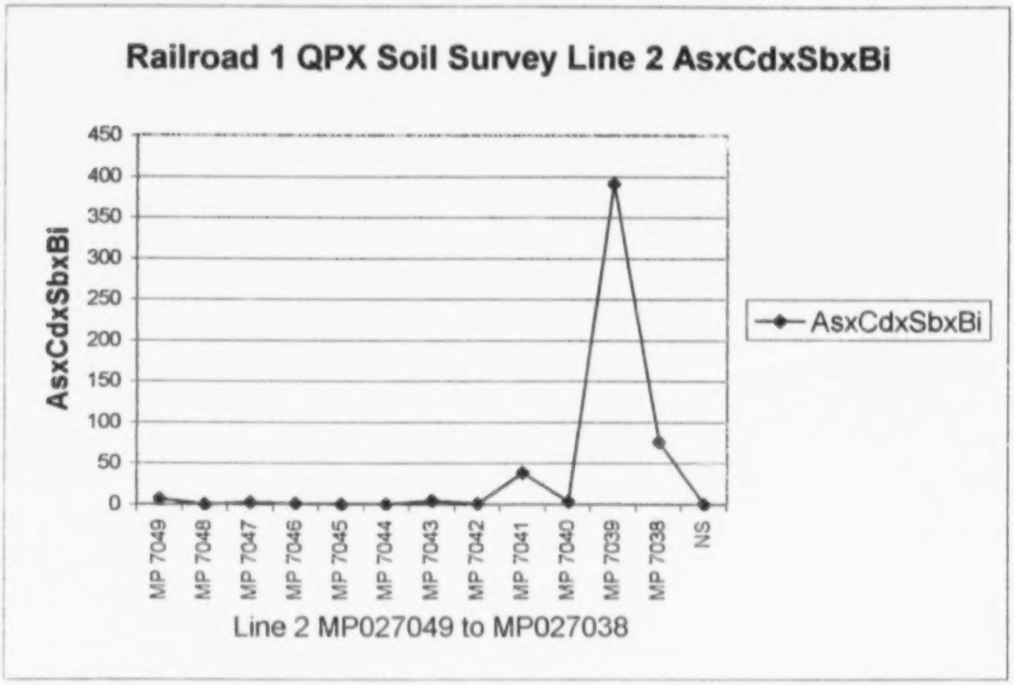
| SAMPLEID | Tl Q | S Q | Hg Q | Se Q | Te Q | Ga Q |
|---|---|---|---|---|---|---|
| Det. Limit | 0.02 | 0.01 | 5.00 | 0.10 | 0.02 | 0.10 |
| Unit | ppm | pct | ppb | ppm | ppm | ppm |
| **Line 6** | | | | | Te | |
| MP027101 | 0.29 | 0.08 | < 5 | 0.81 | 0.02 | 25.43 |
| MP027100 | 0.38 | 0.09 | < 5 | 1.17 | < .02 | 35.19 |
| MP027099 | 0.23 | 0.06 | < 5 | 0.58 | 0.03 | 18.43 |
| MP027098 | 0.21 | 0.04 | < 5 | 0.47 | < .02 | 17.32 |
| MP027097 | 0.29 | 0.06 | < 5 | 0.60 | 0.03 | 21.44 |
| MP027096 | 0.68 | 0.09 | < 5 | 0.85 | 0.02 | 37.44 |
| MP027095 | 0.33 | 0.06 | < 5 | 0.76 | 0.02 | 24.85 |
| MP027094 | 0.37 | 0.14 | < 5 | 2.08 | 0.03 | 42.22 |
| MP027093 | 0.30 | 0.21 | < 5 | 2.54 | 0.04 | 61.79 |
| MP027092 | 0.15 | 0.01 | < 5 | 0.05 | < .02 | 4.60 |
| MP027091 | 0.12 | 0.06 | < 5 | 0.40 | < .02 | 8.00 |
| MP027090 | 0.15 | 0.01 | < 5 | 0.05 | < .02 | 4.80 |
| MP027089 | 0.20 | 0.02 | < 5 | 0.10 | < .02 | 6.30 |
| **Line 7** | | | | | | |
| MP027075 | 0.32 | 0.03 | < 5 | 0.58 | < .02 | 22.37 |
| MP027074 | 0.31 | 0.18 | < 5 | 1.84 | < .02 | 25.80 |
| MP027073 | 0.39 | 0.03 | < 5 | 0.29 | < .02 | 24.35 |
| MP027072 | 0.48 | 0.04 | < 5 | 0.44 | < .02 | 23.78 |
| MP027071 | 0.35 | 0.10 | < 5 | 2.14 | 0.02 | 31.95 |
| MP027070 | 0.37 | 0.02 | < 5 | 0.25 | < .02 | 17.70 |
| MP027069 | 0.26 | 0.04 | < 5 | 0.50 | < .02 | 17.20 |
| MP027068 | 0.17 | 0.01 | < 5 | 0.05 | < .02 | 8.70 |
| MP027067 | 0.19 | 0.01 | < 5 | 0.05 | < .02 | 4.20 |
| MP027066 | 0.58 | 0.12 | < 5 | 0.87 | 0.02 | 48.89 |
| MP027065 | 0.16 | 0.03 | < 5 | 0.05 | < .02 | 4.70 |
| MP027064 | 0.50 | 0.02 | < 5 | 0.06 | 0.02 | 18.92 |
| MP027063 | 0.39 | 0.07 | < 5 | 0.07 | < .02 | 20.19 |
| **Line 8** | | | | | | |
| MP027076 | 0.73 | 0.08 | < 5 | 0.56 | 0.02 | 57.28 |
| MP027077 | 0.54 | 0.02 | < 5 | 0.16 | 0.02 | 24.23 |
| MP027078 | 0.52 | 0.07 | < 5 | 0.94 | 0.02 | 30.90 |
| MP027079 | 0.19 | 0.05 | < 5 | 0.73 | 0.03 | 14.80 |
| MP027080 | 0.24 | 0.10 | < 5 | 0.85 | 0.02 | 47.20 |
| MP027081 | 0.19 | 0.03 | < 5 | 0.43 | 0.03 | 18.02 |
| MP027082 | 0.34 | 0.04 | < 5 | 0.57 | 0.02 | 18.51 |
| MP027083 | 0.26 | 0.06 | < 5 | 0.73 | 0.03 | 20.59 |
| MP027084 | 0.49 | 0.25 | < 5 | 1.84 | 0.05 | 89.19 |
| MP027085 | 0.68 | 0.16 | < 5 | 1.94 | 0.04 | 70.99 |
| MP027086 | 0.90 | 0.14 | < 5 | 1.12 | 0.02 | 42.15 |
| MP027087 | 0.38 | 0.05 | < 5 | 0.64 | 0.02 | 25.28 |
| MP027088 | 0.29 | 0.09 | < 5 | 1.37 | < .02 | 40.05 |

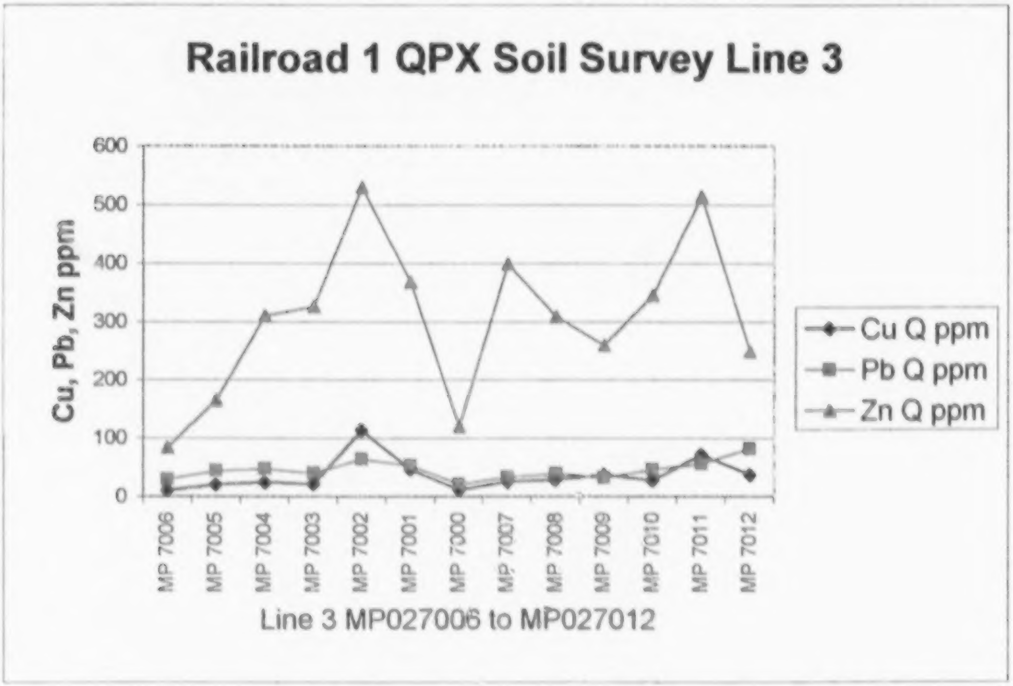
Appendix 3b. Profile plots, QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)



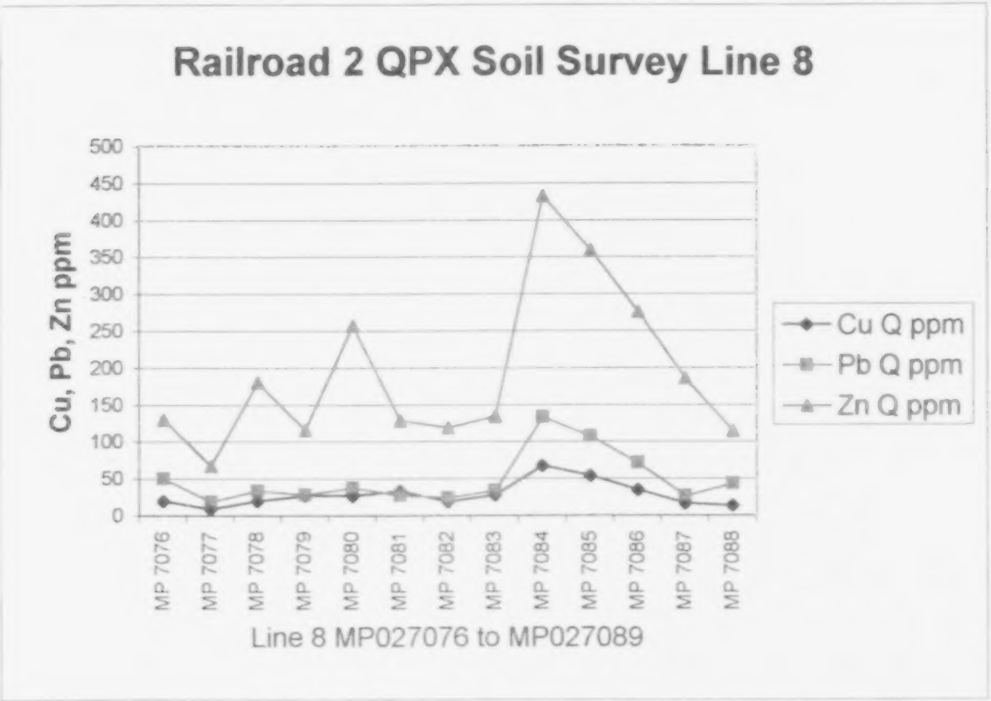


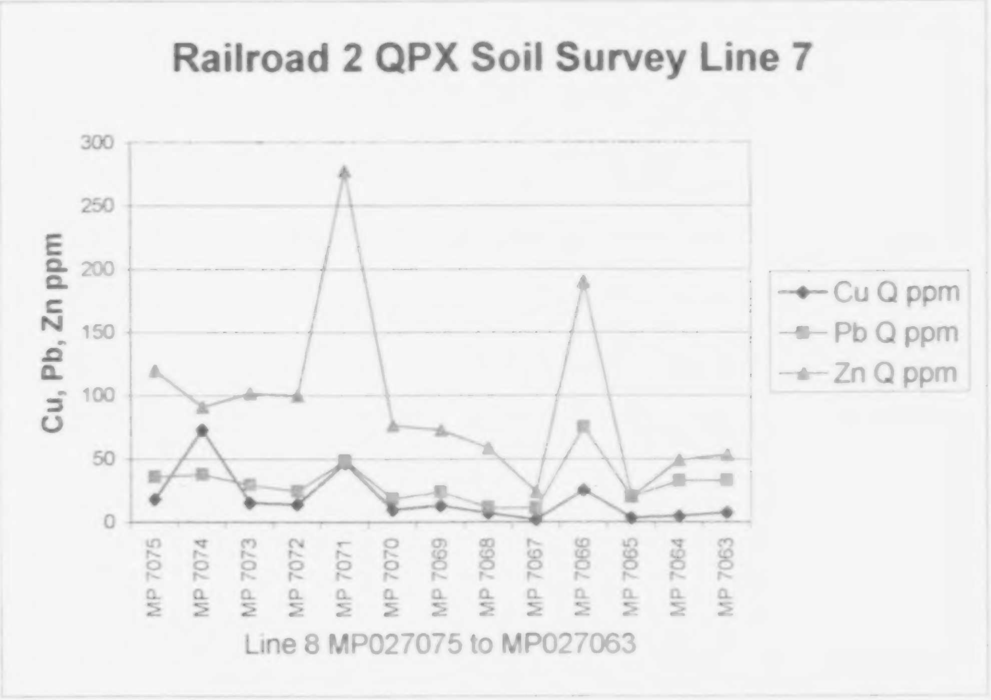
Appendix 3b. Profile plots, QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)



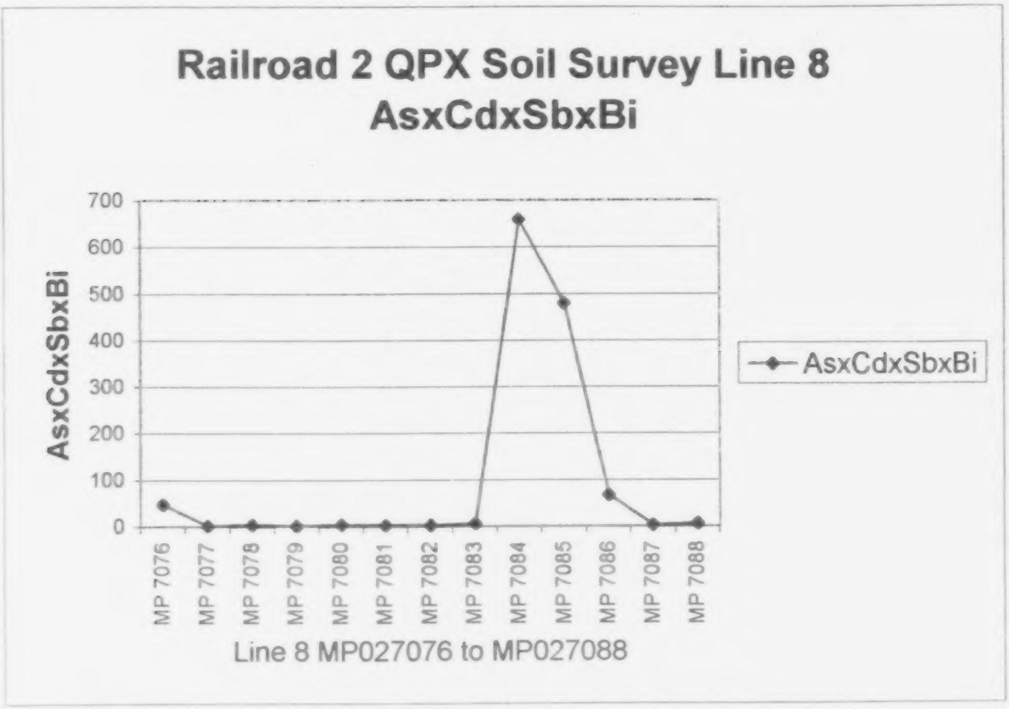


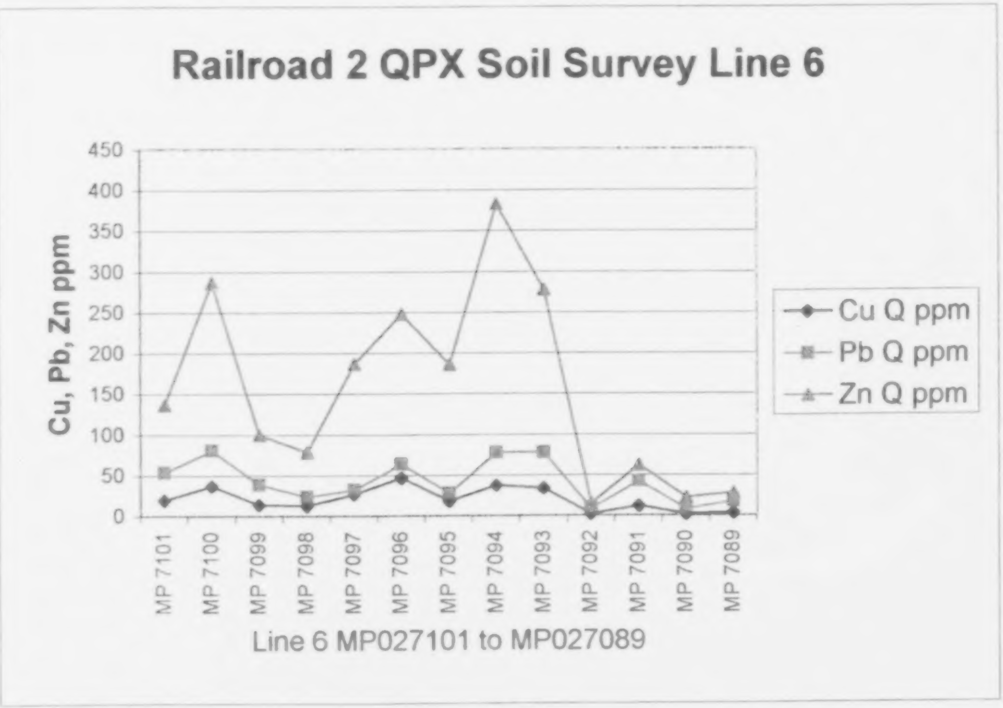
Appendix 3b. Profile plots, QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)





Appendix 3b. Profile plots, QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)





## Appendix 4a. QPX B-horizon soil geochemistry, Mount Fronsac massive sulphide deposit, Bathurst Mining Camp, 21 O/8, New Brunswick - (ICP-MS)

| SAMPLEID | Mo Q | Cu Q | Pb Q | Zn Q | Ag Q | Ni Q | Co Q | Mn Q | Fe Q | As Q | U Q | Au Q | Th Q | Sr Q | Cd Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.01 | 0.01 | 0.01 | 0.10 | 2.00 | 0.10 | 0.10 | 1.00 | 0.01 | 0.10 | 0.10 | 0.20 | 0.10 | 0.50 | 0.01 |
| Unit | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | pct | ppm | ppm | ppb | ppm | ppm | ppm |
| **Line 1** | | | | | | | | | | | | | | | |
| MP027102 | 1.17 | 7.86 | 46.38 | 45.50 | 93.00 | 9.00 | 3.60 | 142.00 | 4.37 | 20.80 | 1.50 | 7.30 | 9.30 | 7.60 | 0.09 |
| MP027103 | 3.03 | 11.52 | 77.73 | 119.51 | 335.36 | 11.94 | 4.83 | 342.46 | 9.72 | 36.24 | 3.41 | 3.13 | 22.88 | 12.08 | 0.54 |
| MP027104 | 3.30 | 19.07 | 140.42 | 129.25 | 1037.76 | 13.08 | 6.20 | 402.71 | 13.75 | 68.50 | 4.65 | 0.86 | 31.15 | 12.22 | 0.40 |
| MP027105 | 8.29 | 32.65 | 386.58 | 187.96 | 535.76 | 28.71 | 9.18 | 485.44 | 24.78 | 340.10 | 6.81 | 0.30 | 38.78 | 23.68 | 0.30 |
| MP027106 | 1.48 | 11.43 | 34.48 | 98.55 | 166.92 | 4.17 | 2.25 | 243.96 | 1.73 | 17.01 | 1.93 | 8.99 | 14.77 | 41.73 | 0.42 |
| MP027107 | 1.80 | 20.72 | 93.75 | 133.50 | 63.00 | 23.40 | 13.20 | 731.00 | 5.63 | 36.60 | 2.90 | 0.90 | 14.60 | 12.60 | 0.20 |
| MP027108 | 0.45 | 3.01 | 12.11 | 14.10 | 24.00 | 0.90 | 0.80 | 38.00 | 0.63 | 10.00 | 0.90 | 2.40 | 5.90 | 2.50 | 0.08 |
| MP027109 | 1.18 | 14.78 | 64.50 | 126.39 | 726.08 | 5.08 | 1.49 | 473.60 | 0.55 | 8.22 | 0.90 | 1.49 | 4.78 | 47.51 | 0.57 |
| MP027110 | 3.12 | 43.71 | 206.49 | 106.04 | 261.80 | 10.56 | 4.62 | 244.20 | 21.43 | 167.20 | 7.04 | 1.76 | 38.94 | 11.22 | 0.40 |
| MP027111 | 0.44 | 4.92 | 14.03 | 14.20 | 104.00 | 0.90 | 0.60 | 33.00 | 0.45 | 6.60 | 0.70 | 2.80 | 3.90 | 5.10 | 0.12 |
| MP027112 | 1.52 | 9.00 | 33.57 | 67.57 | 506.01 | 3.03 | 1.82 | 130.29 | 1.00 | 15.76 | 2.12 | 8.79 | 10.00 | 20.91 | 0.36 |
| MP027113 | 0.46 | 2.65 | 12.08 | 15.70 | 12.00 | 0.80 | 0.60 | 53.00 | 0.60 | 10.50 | 0.80 | 1.50 | 5.50 | 2.70 | 0.04 |
| MP027114 | 4.09 | 49.35 | 114.90 | 222.40 | 148.01 | 47.91 | 18.70 | 856.90 | 14.26 | 123.86 | 5.06 | 10.91 | 23.76 | 21.81 | 0.47 |
| MP027115 | 3.03 | 31.05 | 83.63 | 120.69 | 524.82 | 11.10 | 11.10 | 462.40 | 21.18 | 71.90 | 8.79 | 0.46 | 36.76 | 32.14 | 0.72 |
| MP027116 | 1.68 | 16.20 | 61.38 | 113.17 | 124.14 | 17.61 | 6.93 | 326.23 | 13.63 | 37.82 | 4.62 | 6.35 | 27.14 | 17.61 | 0.35 |
| **Line 2** | | | | | | | | | | | | | | | |
| MP027130 | 6.90 | 15.83 | 145.87 | 162.88 | 164.16 | 7.70 | 4.62 | 628.43 | 18.26 | 68.23 | 3.33 | 0.77 | 23.34 | 18.21 | 0.33 |
| MP027129 | 3.62 | 7.46 | 69.66 | 76.64 | 190.40 | 2.72 | 2.72 | 390.40 | 6.75 | 25.28 | 1.44 | 0.96 | 9.44 | 8.80 | 0.19 |
| MP027128 | 0.55 | 1.67 | 27.09 | 38.50 | 48.00 | 0.50 | 0.30 | 502.00 | 0.39 | 1.90 | 0.70 | 0.90 | 3.90 | 3.90 | 0.08 |
| MP027127 | 3.37 | 44.22 | 249.47 | 220.80 | 142.00 | 2.10 | 11.70 | 719.00 | 6.48 | 33.30 | 0.90 | 1.70 | 6.70 | 13.50 | 0.08 |
| MP027126 | 2.61 | 27.09 | 268.11 | 334.37 | 473.44 | 2.96 | 5.65 | 1904.52 | 15.49 | 22.33 | 1.08 | 0.27 | 8.88 | 15.87 | 0.16 |
| MP027125 | 5.08 | 15.56 | 104.06 | 132.86 | 445.10 | 2.70 | 4.05 | 759.82 | 11.04 | 30.12 | 1.80 | 4.50 | 11.24 | 20.01 | 0.16 |
| MP027124 | 0.27 | 2.36 | 10.74 | 26.80 | 99.00 | 0.60 | 0.70 | 441.00 | 0.58 | 1.70 | 0.30 | 0.10 | 2.70 | 5.40 | 0.08 |
| MP027123 | 2.70 | 13.57 | 155.47 | 224.46 | 188.50 | 4.06 | 5.80 | 1177.40 | 17.08 | 21.75 | 1.45 | 4.35 | 11.60 | 23.78 | 0.20 |
| MP027122 | 2.34 | 17.40 | 169.07 | 165.34 | 211.17 | 3.11 | 4.91 | 852.88 | 10.61 | 17.84 | 1.31 | 0.49 | 9.33 | 10.97 | 0.13 |
| MP027121 | 1.70 | 16.96 | 84.60 | 215.00 | 156.00 | 6.20 | 7.00 | 856.00 | 14.22 | 14.40 | 1.20 | 0.20 | 9.00 | 12.40 | 0.28 |
| MP027120 | 0.64 | 2.23 | 23.68 | 48.80 | 15.00 | 0.80 | 1.00 | 405.00 | 1.13 | 4.20 | 0.60 | 2.40 | 4.00 | 7.30 | 0.04 |
| MP027119 | 3.88 | 20.42 | 171.33 | 243.75 | 128.29 | 6.41 | 7.09 | 1228.86 | 21.03 | 29.71 | 2.36 | 7.76 | 14.18 | 21.61 | 0.20 |
| MP027118 | 1.27 | 9.65 | 61.72 | 105.80 | 47.00 | 2.10 | 6.20 | 564.00 | 5.52 | 12.70 | 0.80 | 1.70 | 5.70 | 10.20 | 0.04 |
| MP027117 | 1.37 | 7.81 | 38.76 | 52.40 | 64.00 | 4.30 | 5.40 | 257.00 | 4.79 | 12.20 | 0.90 | 1.60 | 5.30 | 6.50 | 0.05 |
| **Line 3** | | | | | | | | | | | | | | | |
| MP027141 | 3.48 | 27.91 | 76.46 | 305.16 | 142.98 | 21.34 | 16.86 | 1534.35 | 12.57 | 41.40 | 3.63 | 0.21 | 27.53 | 10.46 | 0.38 |
| MP027140 | 5.91 | 26.99 | 157.18 | 388.61 | 201.48 | 40.30 | 22.08 | 1548.36 | 11.65 | 51.89 | 3.04 | 3.59 | 24.84 | 20.70 | 0.41 |
| MP027139 | 3.49 | 28.59 | 77.34 | 274.18 | 134.37 | 21.44 | 14.87 | 1835.48 | 18.38 | 47.17 | 4.29 | 0.29 | 30.68 | 10.29 | 0.51 |
| MP027138 | 1.25 | 13.57 | 31.87 | 157.40 | 36.00 | 14.10 | 10.00 | 613.00 | 4.77 | 17.50 | 1.40 | 3.10 | 10.80 | 5.70 | 0.18 |
| MP027137 | 3.75 | 16.31 | 98.67 | 220.32 | 91.01 | 22.37 | 17.82 | 1945.30 | 13.92 | 71.29 | 3.79 | 2.65 | 21.24 | 36.78 | 0.61 |
| MP027136 | 2.82 | 22.72 | 71.19 | 197.60 | 158.36 | 17.44 | 11.93 | 741.29 | 18.18 | 36.95 | 3.21 | 0.46 | 26.65 | 7.34 | 0.34 |
| MP027135 | 2.89 | 19.74 | 68.24 | 231.69 | 92.50 | 18.72 | 15.79 | 1570.18 | 13.78 | 39.03 | 3.38 | 0.23 | 21.88 | 8.12 | 0.27 |
| MP027134 | 2.69 | 16.39 | 78.76 | 116.06 | 369.96 | 14.70 | 6.84 | 676.58 | 22.30 | 32.69 | 2.79 | 0.25 | 24.33 | 7.35 | 0.33 |
| MP027133 | 2.54 | 15.64 | 70.22 | 170.35 | 130.04 | 10.40 | 6.18 | 881.02 | 22.82 | 47.46 | 3.25 | 0.33 | 25.03 | 12.03 | 0.49 |
| MP027132 | 3.59 | 35.49 | 106.07 | 213.18 | 157.08 | 25.81 | 13.46 | 1525.92 | 30.52 | 59.84 | 4.86 | 4.49 | 31.42 | 16.83 | 0.45 |
| MP027131 | 3.35 | 22.44 | 69.53 | 120.74 | 318.63 | 11.40 | 6.04 | 1009.55 | 29.72 | 41.25 | 3.02 | 1.34 | 17.44 | 16.77 | 0.27 |

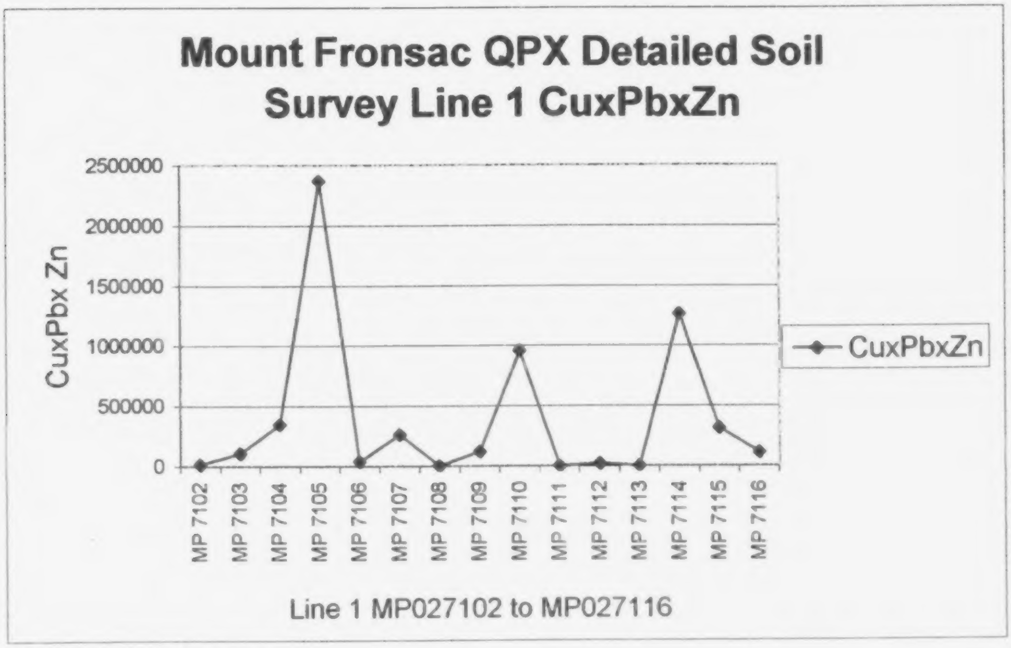
## Appendix 4a. QPX B-horizon soil geochemistry, Mount Fronsac massive sulphide deposit, Bathurst Mining Camp, 21 O/8, New Brunswick - (ICP-MS)

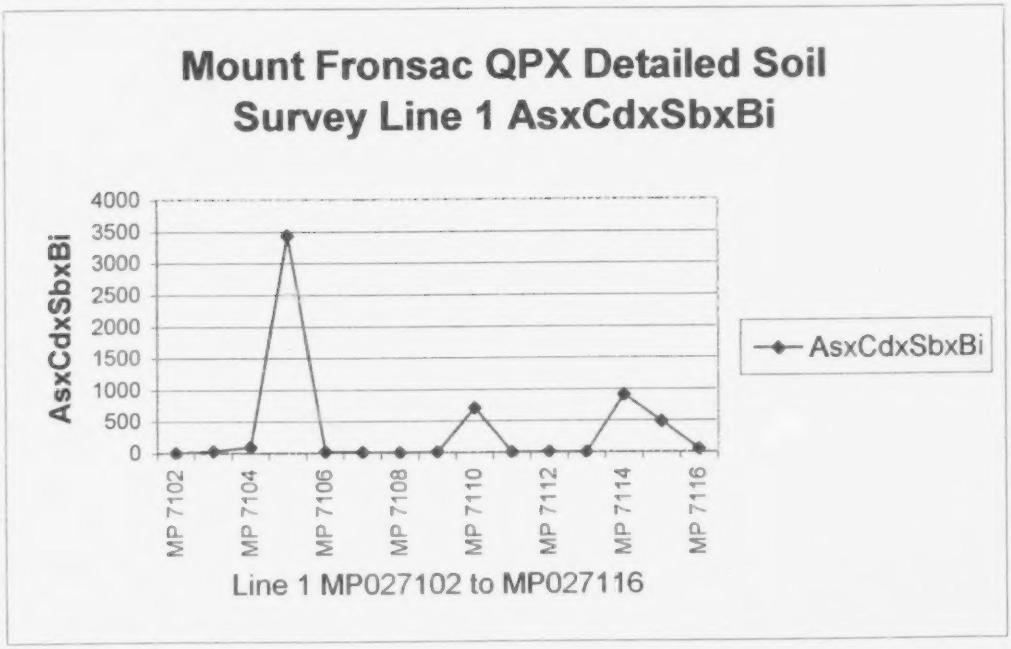
| SAMPLEID | Sb Q | Bi Q | V Q | Ca Q | P Q | La Q | Cr Q | Mg Q | Ba Q | Ti Q | B Q | Al Q | Na Q | K Q | W Q | Sc Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.02 | 0.02 | 2.00 | 0.01 | 0.001 | 0.50 | 0.50 | 0.01 | 0.50 | 0.001 | 1.00 | 0.01 | 0.001 | 0.01 | 0.20 | 0.10 |
| Unit | ppm | ppm | ppm | ppm | pct | ppm | ppm | pct | ppm | pct | ppm | pct | pct | pct | ppm | ppm |
| **Line 1** | | | | | | | | | | | | | | | W | |
| MP027102 | 0.83 | 0.62 | 55.00 | 0.06 | 0.13 | 19.70 | 8.50 | 0.22 | 106.80 | 0.08 | 1.00 | 1.64 | 0.02 | 0.64 | < .1 | 3.00 |
| MP027103 | 1.39 | 0.91 | 68.21 | 0.20 | 0.58 | 32.11 | 29.84 | 0.51 | 195.10 | 0.10 | 2.84 | 7.62 | 0.02 | 0.87 | 0.10 | 6.25 |
| MP027104 | 2.50 | 1.31 | 99.82 | 0.09 | 0.55 | 43.89 | 37.86 | 0.60 | 180.02 | 0.17 | 3.44 | 11.67 | 0.03 | 0.98 | < .1 | 12.56 |
| MP027105 | 7.58 | 4.50 | 142.08 | 0.27 | 0.31 | 50.62 | 60.68 | 1.15 | 331.52 | 0.32 | 1.48 | 9.29 | 0.05 | 1.69 | < .1 | 10.95 |
| MP027106 | 2.34 | 1.03 | 44.94 | 0.42 | 0.17 | 43.34 | 5.46 | 0.42 | 271.89 | 0.06 | 1.61 | 2.63 | 0.04 | 1.16 | < .1 | 8.03 |
| MP027107 | 1.47 | 0.76 | 54.00 | 0.08 | 0.14 | 48.90 | 26.70 | 0.72 | 99.00 | 0.07 | 2.00 | 3.44 | 0.02 | 0.70 | < .1 | 6.40 |
| MP027108 | 0.63 | 0.41 | 19.00 | 0.01 | 0.03 | 16.00 | 1.70 | 0.11 | 44.10 | 0.03 | 0.50 | 0.75 | 0.01 | 0.48 | < .1 | 2.20 |
| MP027109 | 1.81 | 0.57 | 11.95 | 0.64 | 0.14 | 14.64 | 3.88 | 0.18 | 413.54 | 0.02 | 2.99 | 0.99 | 0.03 | 0.55 | < .1 | 2.09 |
| MP027110 | 2.18 | 4.86 | 187.00 | 0.07 | 0.36 | 48.18 | 53.02 | 0.64 | 233.42 | 0.31 | 4.40 | 12.96 | 0.04 | 1.54 | < .1 | 10.56 |
| MP027111 | 0.58 | 0.42 | 6.00 | 0.01 | 0.03 | 13.70 | 1.20 | 0.07 | 70.70 | 0.01 | 0.50 | 0.56 | 0.01 | 0.38 | < .1 | 1.10 |
| MP027112 | 2.39 | 0.58 | 12.12 | 0.03 | 0.07 | 37.27 | 1.82 | 0.21 | 185.44 | 0.02 | 1.52 | 1.45 | 0.04 | 1.12 | < .1 | 3.33 |
| MP027113 | 0.58 | 0.56 | 17.00 | 0.01 | 0.03 | 16.50 | 1.60 | 0.11 | 50.80 | 0.01 | 0.50 | 0.85 | 0.01 | 0.54 | < .1 | 2.10 |
| MP027114 | 3.08 | 5.10 | 132.43 | 0.08 | 0.20 | 68.55 | 85.69 | 2.06 | 344.32 | 0.21 | 1.95 | 8.41 | 0.08 | 2.34 | < .1 | 12.85 |
| MP027115 | 1.90 | 4.95 | 194.21 | 0.14 | 0.52 | 99.18 | 45.08 | 0.83 | 245.07 | 0.41 | 4.62 | 16.95 | 0.07 | 1.39 | < .1 | 22.43 |
| MP027116 | 1.62 | 2.05 | 103.93 | 0.06 | 0.22 | 48.79 | 44.46 | 0.89 | 207.86 | 0.13 | 5.77 | 8.52 | 0.05 | 1.85 | < .1 | 12.99 |
| **Line 2** | | | | | | | | | | | | | | | | |
| MP027130 | 1.80 | 2.59 | 200.07 | 0.05 | 0.77 | 52.84 | 28.47 | 0.80 | 222.39 | 0.32 | 7.70 | 7.34 | 0.04 | 2.03 | 0.10 | 13.34 |
| MP027129 | 1.09 | 0.93 | 104.00 | 0.02 | 0.26 | 27.68 | 8.00 | 0.35 | 112.80 | 0.18 | 3.20 | 2.53 | 0.02 | 0.99 | < .1 | 6.56 |
| MP027128 | 0.33 | 0.09 | 2.00 | 0.01 | 0.04 | 9.00 | 0.50 | 0.07 | 37.40 | 0.05 | 0.50 | 0.38 | 0.01 | 0.19 | < .1 | 2.00 |
| MP027127 | 0.85 | 2.69 | 107.00 | 0.03 | 0.21 | 29.20 | 3.70 | 0.36 | 95.50 | 0.12 | 0.50 | 2.06 | 0.02 | 0.57 | < .1 | 8.00 |
| MP027126 | 1.64 | 3.12 | 201.75 | 0.05 | 0.87 | 25.82 | 8.34 | 0.94 | 158.17 | 0.31 | 2.69 | 5.49 | 0.04 | 0.91 | 0.20 | 18.56 |
| MP027125 | 1.37 | 5.40 | 116.90 | 0.02 | 0.41 | 44.74 | 10.12 | 0.58 | 171.52 | 0.11 | 4.50 | 3.69 | 0.02 | 1.10 | < .1 | 11.24 |
| MP027124 | 0.32 | 0.25 | 11.00 | 0.03 | 0.04 | 8.00 | 0.50 | 0.10 | 51.00 | 0.06 | 1.00 | 0.52 | 0.01 | 0.23 | < .1 | 2.70 |
| MP027123 | 2.09 | 5.05 | 197.20 | 0.12 | 0.52 | 36.83 | 13.92 | 0.81 | 207.64 | 0.40 | 5.80 | 4.99 | 0.05 | 0.99 | 0.10 | 20.01 |
| MP027122 | 0.97 | 2.68 | 109.68 | 0.05 | 0.44 | 24.23 | 13.26 | 0.77 | 120.97 | 0.17 | 0.82 | 4.04 | 0.03 | 0.92 | < .1 | 13.42 |
| MP027121 | 1.06 | 2.82 | 168.00 | 0.04 | 0.68 | 23.80 | 18.80 | 0.84 | 188.20 | 0.30 | 2.00 | 6.82 | 0.04 | 1.00 | 0.10 | 17.60 |
| MP027120 | 0.32 | 0.89 | 22.00 | 0.02 | 0.05 | 12.90 | 1.40 | 0.24 | 64.70 | 0.06 | 0.50 | 1.02 | 0.01 | 0.45 | < .1 | 4.40 |
| MP027119 | 1.72 | 5.37 | 229.57 | 0.07 | 0.90 | 45.91 | 26.00 | 1.25 | 237.67 | 0.34 | 1.69 | 8.74 | 0.06 | 1.62 | 0.20 | 26.00 |
| MP027118 | 0.29 | 2.26 | 68.00 | 0.03 | 0.19 | 24.70 | 4.20 | 0.49 | 113.20 | 0.08 | 2.00 | 2.07 | 0.03 | 0.71 | < .1 | 8.60 |
| MP027117 | 0.53 | 0.64 | 67.00 | 0.01 | 0.17 | 20.00 | 7.20 | 0.25 | 70.40 | 0.15 | 0.50 | 1.40 | 0.02 | 0.43 | < .1 | 4.80 |
| **Line 3** | | | | | | | | | | | | | | | | |
| MP027141 | 1.22 | 2.65 | 211.30 | 0.07 | 0.56 | 55.01 | 53.66 | 0.84 | 283.75 | 0.06 | 1.07 | 14.75 | 0.03 | 1.52 | < .1 | 20.49 |
| MP027140 | 1.79 | 2.88 | 216.92 | 0.11 | 1.27 | 80.41 | 64.70 | 1.65 | 353.43 | 0.09 | 2.76 | 10.82 | 0.05 | 2.24 | < .1 | 18.22 |
| MP027139 | 1.89 | 1.95 | 146.30 | 0.07 | 0.53 | 57.87 | 40.64 | 0.94 | 307.22 | 0.13 | 1.43 | 12.35 | 0.05 | 2.12 | < .1 | 22.01 |
| MP027138 | 0.60 | 1.47 | 124.17 | 0.05 | 0.40 | 37.00 | 58.79 | 0.86 | 172.06 | 0.03 | 1.00 | 4.45 | 0.02 | 0.88 | < .1 | 8.90 |
| MP027137 | 2.01 | 1.31 | 90.24 | 0.07 | 0.63 | 53.92 | 43.09 | 1.13 | 222.89 | 0.13 | 3.79 | 8.19 | 0.08 | 2.54 | < .1 | 16.68 |
| MP027136 | 1.26 | 1.31 | 114.75 | 0.07 | 0.50 | 39.24 | 69.77 | 0.90 | 188.88 | 0.11 | 4.59 | 16.11 | 0.03 | 1.08 | 0.10 | 17.90 |
| MP027135 | 1.35 | 2.28 | 109.97 | 0.30 | 0.48 | 101.25 | 46.26 | 1.71 | 447.84 | 0.10 | 4.51 | 15.93 | 0.05 | 1.49 | < .1 | 20.30 |
| MP027134 | 1.24 | 0.61 | 49.00 | 0.03 | 0.13 | 28.50 | 22.00 | 0.64 | 136.50 | 0.14 | 5.07 | 13.35 | 0.03 | 1.01 | 0.10 | 15.96 |
| MP027133 | 1.53 | 2.00 | 128.66 | 0.06 | 0.49 | 54.89 | 60.61 | 1.40 | 298.19 | 0.17 | 9.75 | 11.77 | 0.05 | 2.08 | < .1 | 21.13 |
| MP027132 | 1.87 | 1.35 | 91.08 | 0.08 | 0.30 | 69.55 | 61.00 | 1.66 | 315.47 | 0.38 | 7.48 | 15.82 | 0.08 | 2.62 | 0.20 | 26.18 |
| MP027131 | 1.74 | 1.15 | 78.96 | 0.06 | 0.39 | 59.54 | 52.71 | 1.02 | 246.69 | 0.23 | 3.35 | 8.92 | 0.06 | 1.95 | 0.10 | 18.45 |

## Appendix 4a. QPX B-horizon soil geochemistry, Mount Fronsac massive sulphide deposit, Bathurst Mining Camp, 21 O/8, New Brunswick - (ICP-MS)

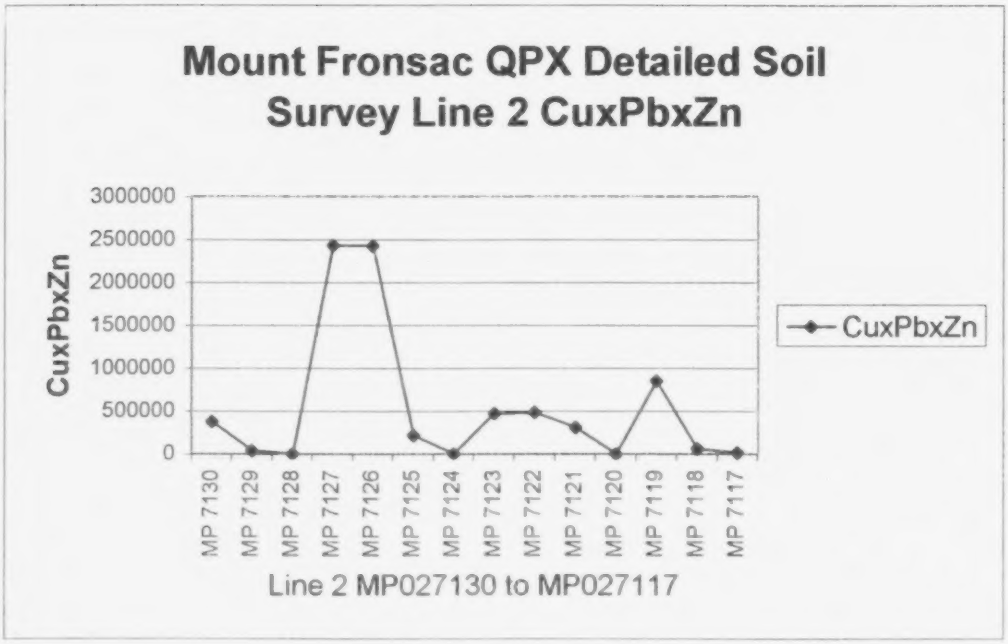
| SAMPLEID | Tl Q | S Q | Hg Q | Se Q | Te Q | Ga Q |
|---|---|---|---|---|---|---|
| Det. Limit | 0.02 | 0.01 | 5.00 | 0.10 | 0.02 | 0.10 |
| Unit | ppm | pct | ppb | ppm | ppm | ppm |
| **Line 1** | | | Hg | | | |
| MP027102 | 0.82 | 0.04 | < 5 | 0.10 | 0.03 | 16.90 |
| MP027103 | 0.40 | 0.09 | < 5 | 1.28 | 0.04 | 22.59 |
| MP027104 | 0.55 | 0.10 | < 5 | 2.07 | 0.07 | 26.50 |
| MP027105 | 1.18 | 0.15 | < 5 | 2.07 | 0.09 | 51.21 |
| MP027106 | 0.45 | 0.03 | < 5 | 0.64 | 0.06 | 21.51 |
| MP027107 | 0.38 | 0.04 | < 5 | 0.40 | 0.02 | 12.20 |
| MP027108 | 0.30 | 0.01 | < 5 | 0.10 | 0.01 | 6.70 |
| MP027109 | 0.12 | 0.03 | < 5 | 0.75 | 0.04 | 5.98 |
| MP027110 | 0.81 | 0.15 | < 5 | 2.42 | 0.02 | 64.02 |
| MP027111 | 0.12 | 0.01 | < 5 | 0.05 | 0.01 | 3.20 |
| MP027112 | 0.39 | 0.03 | < 5 | 0.15 | 0.06 | 10.00 |
| MP027113 | 0.31 | 0.01 | < 5 | 0.05 | 0.03 | 6.80 |
| MP027114 | 1.29 | 0.02 | < 5 | 0.78 | 0.08 | 37.78 |
| MP027115 | 0.65 | 0.25 | < 5 | 1.39 | 0.07 | 56.41 |
| MP027116 | 1.13 | 0.12 | < 5 | 0.87 | 0.06 | 49.08 |
| **Line 2** | | | | | | |
| MP027130 | 1.74 | 0.05 | < 5 | 0.77 | 0.10 | 57.71 |
| MP027129 | 0.85 | 0.02 | < 5 | 0.08 | 0.03 | 24.16 |
| MP027128 | 0.08 | 0.01 | < 5 | 0.05 | 0.01 | 3.50 |
| MP027127 | 0.35 | 0.01 | < 5 | 0.05 | 0.01 | 20.20 |
| MP027126 | 0.56 | 0.05 | < 5 | 0.27 | 0.03 | 37.39 |
| MP027125 | 0.65 | 0.01 | < 5 | 0.22 | 0.09 | 28.32 |
| MP027124 | 0.07 | 0.01 | < 5 | 0.05 | 0.02 | 4.00 |
| MP027123 | 0.58 | 0.06 | < 5 | 0.87 | 0.09 | 43.50 |
| MP027122 | 0.59 | 0.05 | < 5 | 0.49 | 0.05 | 25.54 |
| MP027121 | 0.44 | 0.02 | < 5 | 0.80 | 0.04 | 33.60 |
| MP027120 | 0.38 | 0.01 | < 5 | 0.05 | 0.01 | 8.60 |
| MP027119 | 1.49 | 0.03 | < 5 | 0.68 | 0.10 | 55.37 |
| MP027118 | 0.49 | 0.01 | < 5 | 0.05 | 0.02 | 16.60 |
| MP027117 | 0.41 | 0.01 | < 5 | 0.10 | 0.04 | 15.40 |
| **Line 3** | | | | | | |
| MP027141 | 0.64 | 0.09 | < 5 | 1.07 | 0.04 | 23.47 |
| MP027140 | 1.16 | 0.03 | < 5 | 0.55 | 0.11 | 25.67 |
| MP027139 | 1.09 | 0.09 | < 5 | 1.14 | 0.09 | 32.59 |
| MP027138 | 0.40 | 0.01 | < 5 | 0.20 | 0.02 | 12.50 |
| MP027137 | 1.63 | 0.02 | < 5 | 0.19 | 0.08 | 33.37 |
| MP027136 | 0.53 | 0.07 | < 5 | 2.30 | 0.07 | 23.64 |
| MP027135 | 0.81 | 0.07 | < 5 | 1.58 | 0.07 | 23.01 |
| MP027134 | 0.48 | 0.08 | < 5 | 2.28 | 0.05 | 30.66 |
| MP027133 | 1.11 | 0.16 | < 5 | 1.63 | 0.10 | 40.64 |
| MP027132 | 1.68 | 0.15 | < 5 | 2.24 | 0.11 | 68.44 |
| MP027131 | 1.17 | 0.13 | < 5 | 1.68 | 0.10 | 54.33 |

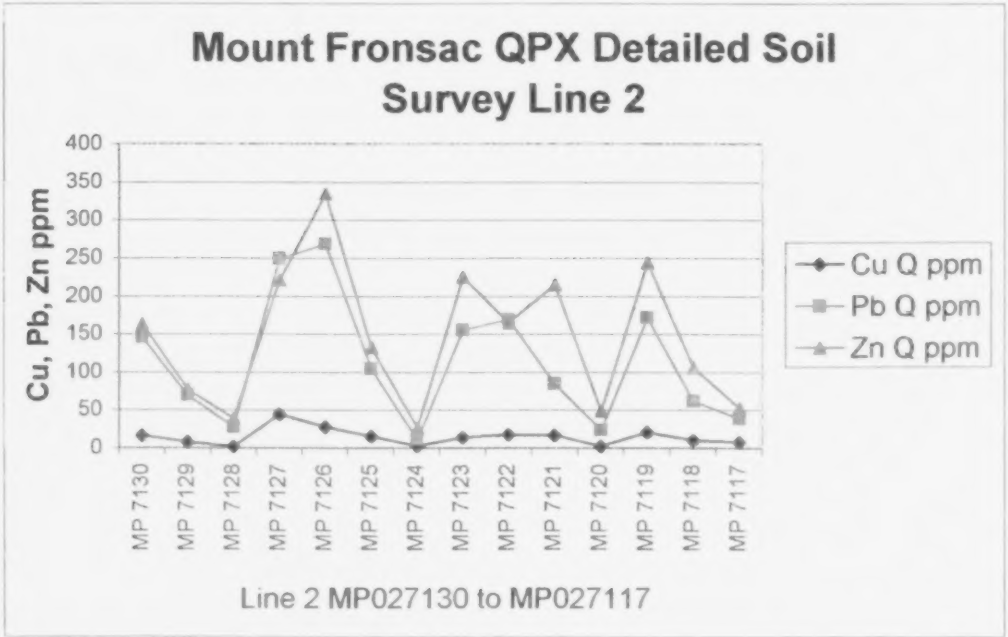
Appendix 4b. Profile plots, QPX B-horizon soil geochemistry, Mount Fronsac massive sulphide deposit, Bathurst Mining Camp, 21 O/8, New Brunswick - (ICP-MS)



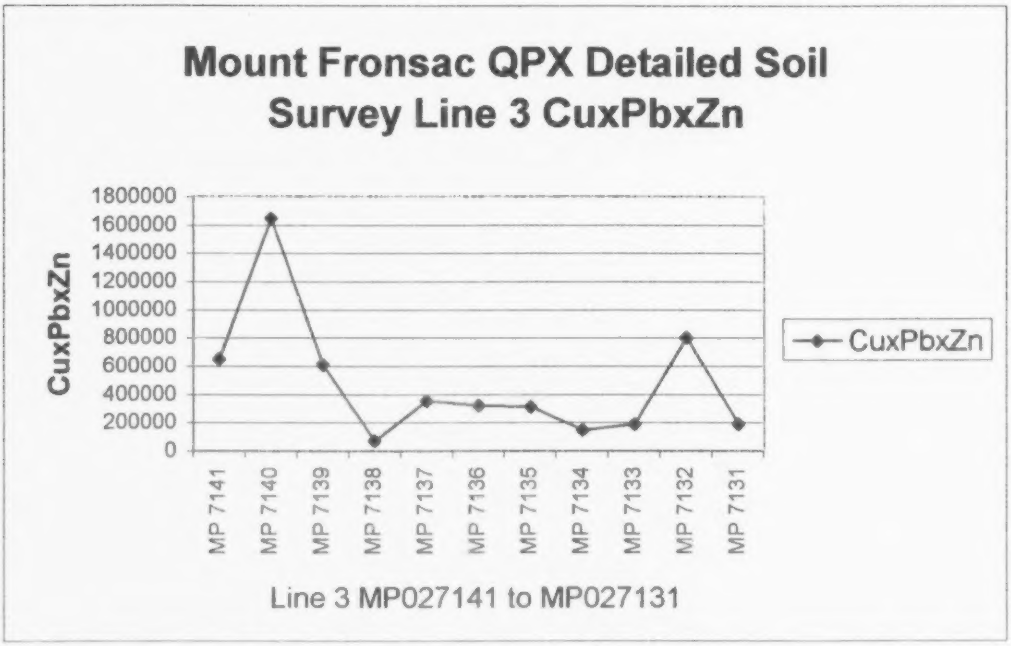


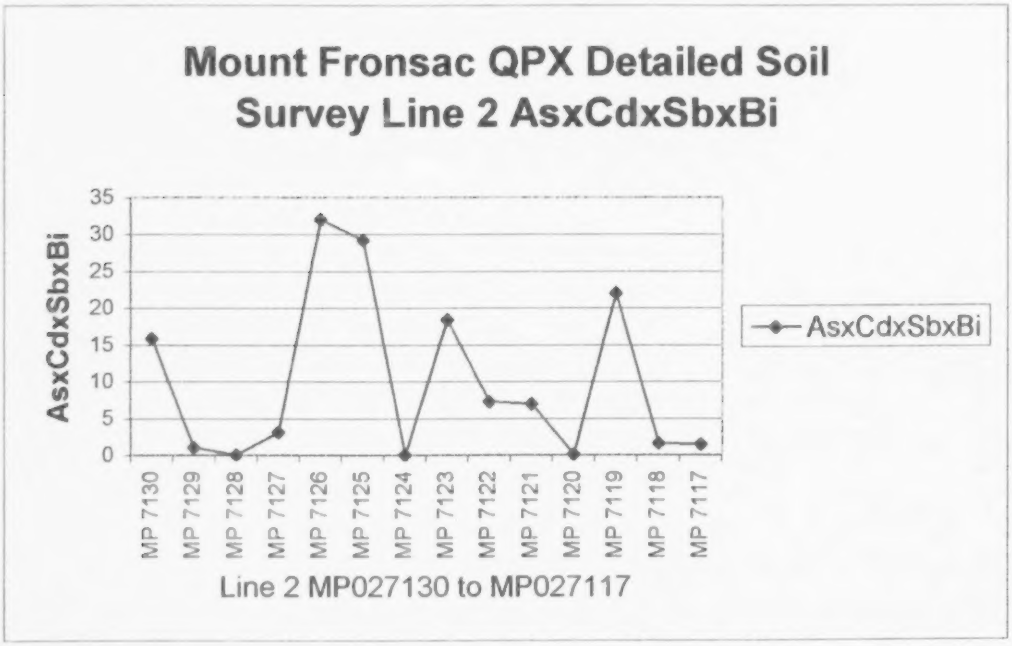
Appendix 4b. Profile plots, QPX B-horizon soil geochemistry, Mount Fronsac massive sulphide deposit, Bathurst Mining Camp, 21 O/8, New Brunswick - (ICP-MS)





Appendix 4b. Profile plots, QPX B-horizon soil geochemistry, Mount Fronsac massive sulphide deposit, Bathurst Mining Camp, 21 O/8, New Brunswick - (ICP-MS)





## Appendix 5a. QPX B-horizon soil geochemistry, Camel Back massive sulphide deposit, Bathurst Mining Camp, 21 O/9, New Brunswick - (ICP-MS)

| SAMPLEID | Mo Q | Cu Q | Pb Q | Zn Q | Ag Q | Ni Q | Co Q | Mn Q | Fe Q | As Q | U Q | Au Q | Th Q | Sr Q | Cd Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.01 | 0.01 | 0.01 | 0.10 | 2.00 | 0.10 | 0.10 | 1.00 | 0.01 | 0.10 | 0.10 | 0.20 | 0.10 | 0.50 | 0.01 |
| Unit | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | pct | ppm | ppm | ppb | ppm | ppm | ppm |
| **Line 1** | | | | | | | | | | | | | | | |
| MP027152 | 3.49 | 25.39 | 114.12 | 197.00 | 424.82 | 35.97 | 18.16 | 935.76 | 18.77 | 73.32 | 3.43 | 3.43 | 23.64 | 31.18 | 0.27 |
| MP027151 | 2.82 | 23.77 | 74.94 | 295.43 | 867.95 | 30.67 | 16.70 | 1861.20 | 17.44 | 36.42 | [illegible].01 | 3.29 | 22.18 | 20.54 | 0.52 |
| MP027150 | 3.18 | 14.65 | 81.58 | 188.28 | 115.03 | 16.65 | 10.29 | 1896.50 | 15.47 | 37.23 | 2.42 | 14.23 | 17.86 | 24.52 | 0.21 |
| MP027149 | 0.76 | 2.27 | 23.80 | 38.00 | 23.00 | 4.00 | 2.20 | 444.42 | 1.18 | 10.30 | 0.70 | 4.30 | 6.00 | 9.20 | 0.09 |
| MP027148 | 5.41 | 29.64 | 118.92 | 189.52 | 189.75 | 27.31 | 15.50 | 786.36 | 7.80 | 51.63 | 3.24 | 11.80 | 19.90 | 23.14 | 0.16 |
| MP027147 | 4.88 | 62.76 | 217.86 | 409.89 | 445.74 | 37.15 | 41.02 | 1518.10 | 13.28 | 114.34 | 4.52 | 14.86 | 24.87 | 34.88 | 1.55 |
| MP027146 | 2.44 | 31.78 | 83.00 | 357.25 | 564.56 | 41.43 | 18.15 | 1050.56 | 9.00 | 45.28 | 3.30 | 9.90 | 21.26 | 17.23 | 0.53 |
| MP027145 | 1.71 | 13.09 | 59.08 | 124.99 | 162.69 | 20.83 | 8.33 | 154.00 | 10.54 | 33.73 | 2.18 | 3.77 | 14.88 | 19.05 | 0.16 |
| MP027144 | 3.44 | 23.30 | 89.68 | 248.05 | 245.74 | 36.14 | 20.82 | 635.67 | 16.97 | 47.99 | 4.05 | 14.46 | 25.44 | 29.20 | 0.46 |
| MP027143 | 3.61 | 39.80 | 80.16 | 252.22 | 194.02 | 36.32 | 20.30 | 1382.69 | 15.97 | 48.96 | 5.41 | 4.29 | 32.04 | 21.66 | 0.43 |
| MP027142 | 2.34 | 21.81 | 75.06 | 215.89 | 240.62 | 29.41 | 16.04 | 1144.28 | 12.74 | 45.90 | 3.34 | 17.16 | 21.61 | 16.49 | 0.29 |
| **Line 2** | | | | | | | | | | | | | | | |
| MP027153 | 4.32 | 18.49 | 94.40 | 191.28 | 206.69 | 25.55 | 12.40 | 1345.36 | 21.91 | 63.51 | 3.01 | 3.76 | 23.68 | 28.94 | 0.53 |
| MP027154 | 2.97 | 29.23 | 82.67 | 293.65 | 742.23 | 37.25 | 19.43 | 1751.65 | 23.48 | 41.29 | 4.05 | 2.70 | 23.75 | 17.81 | 0.70 |
| MP027155 | 3.37 | 25.36 | 91.31 | 193.93 | 649.53 | 32.48 | 16.08 | 1948.59 | 21.56 | 45.16 | 3.71 | 1.55 | 24.13 | 22.89 | 0.34 |
| MP027156 | 3.17 | 24.32 | 82.36 | 181.10 | 408.42 | 30.36 | 16.93 | 1378.43 | 15.05 | 39.23 | 2.96 | 2.69 | 18.54 | 20.96 | 0.73 |
| MP027157 | 2.34 | 24.96 | 112.18 | 129.84 | 350.57 | 16.88 | 9.09 | 512.87 | 14.67 | 49.34 | 3.57 | 4.87 | 25.64 | 19.15 | 0.32 |
| MP027158 | 3.15 | 41.00 | 136.93 | 276.75 | 820.59 | 37.65 | 23.49 | 3423.95 | 22.85 | 66.93 | 4.18 | 1.93 | 32.50 | 22.20 | 0.32 |
| MP027159 | 3.84 | 45.16 | 163.71 | 232.62 | 359.50 | 24.77 | 17.82 | 2108.66 | 27.67 | 66.16 | 5.44 | 2.42 | 30.21 | 21.15 | 0.39 |
| MP027160 | 1.85 | 26.22 | 99.00 | 179.61 | 188.79 | 22.86 | 13.16 | 737.83 | 9.77 | 42.95 | 2.60 | 0.35 | 15.59 | 14.03 | 0.31 |
| MP027161 | 2.32 | 36.46 | 210.33 | 257.44 | 389.38 | 27.03 | 18.99 | 2197.89 | 13.64 | 42.48 | 4.18 | 0.32 | 22.20 | 25.10 | 0.35 |
| MP027162 | 3.65 | 29.52 | 172.31 | 209.46 | 693.12 | 20.98 | 16.42 | 2623.52 | 24.17 | 47.42 | 5.47 | 0.30 | 43.78 | 18.24 | 0.43 |
| MP027163 | 2.98 | 21.13 | 95.99 | 218.41 | 449.67 | 27.39 | 15.21 | 1426.78 | 21.06 | 56.46 | 3.04 | 1.69 | 20.29 | 32.46 | 0.44 |
| **Line 3** | | | | | | | | | | | | | | | |
| MP027170 | 4.43 | 23.78 | 101.53 | 249.80 | 350.47 | 26.80 | 16.15 | 1275.94 | 21.99 | 57.38 | 3.78 | 8.25 | 27.83 | 22.33 | 0.62 |
| MP027169 | 2.22 | 13.31 | 59.49 | 171.91 | 343.82 | 16.30 | 10.97 | 2484.70 | 12.18 | 31.42 | 2.67 | 8.00 | 16.89 | 19.56 | 0.41 |
| MP027168 | 5.04 | 39.20 | 71.70 | 406.05 | 508.84 | 14.83 | 4.86 | 1036.43 | 1.92 | 14.83 | 5.63 | 2.56 | 11.76 | 245.22 | 7.47 |
| MP027167 | 4.32 | 35.41 | 118.17 | 176.28 | 189.65 | 32.33 | 15.86 | 923.37 | 16.51 | 64.36 | 4.04 | 4.66 | 26.43 | 27.05 | 0.50 |
| MP027166 | 4.02 | 26.21 | 86.77 | 191.02 | 172.21 | 28.38 | 14.03 | 708.29 | 18.34 | 49.11 | 3.51 | 4.78 | 21.37 | 27.11 | 0.32 |
| MP027165 | 4.55 | 50.15 | 112.85 | 391.69 | 402.21 | 54.13 | 27.44 | 1636.13 | 20.22 | 71.80 | 5.26 | 4.89 | 33.46 | 27.82 | 0.49 |
| MP027164 | 3.89 | 63.76 | 131.58 | 265.08 | 544.01 | 28.02 | 12.53 | 2226.53 | 22.29 | 140.78 | 4.62 | 3.63 | 31.65 | 19.45 | 0.40 |
| MP027171 | 4.40 | 46.63 | 202.07 | 329.17 | 525.71 | 47.76 | 25.08 | 1793.59 | 23.95 | 66.31 | 4.12 | 5.50 | 26.11 | 30.24 | 0.38 |
| MP027172 | 4.42 | 85.47 | 240.92 | 317.64 | 325.12 | 28.07 | 21.52 | 1422.11 | 18.71 | 110.17 | 5.15 | 0.94 | 31.58 | 20.35 | 0.63 |
| MP027173 | 1.93 | 22.23 | 56.86 | 194.64 | 402.70 | 15.34 | 10.87 | 1000.35 | 8.15 | 30.52 | 2.40 | 3.36 | 14.22 | 11.83 | 0.18 |
| MP027174 | 2.85 | 20.90 | 123.43 | 193.07 | 344.77 | 21.29 | 14.39 | 941.37 | 16.67 | 40.77 | 3.60 | 7.20 | 23.68 | 24.88 | 0.33 |

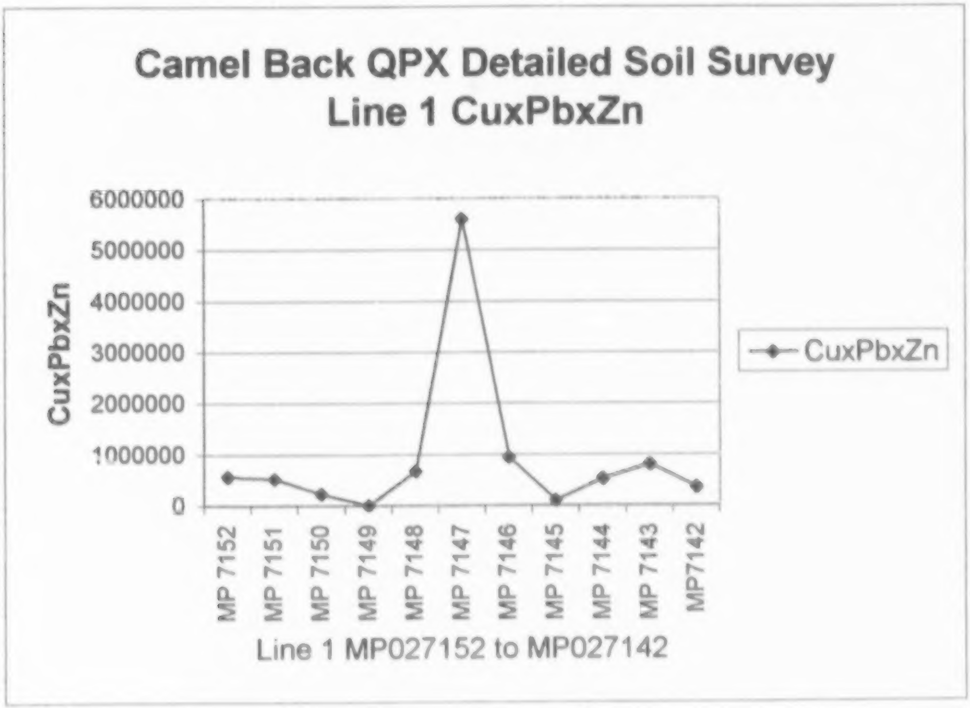
# Appendix 5a. QPX B-horizon soil geochemistry, Camel Back massive sulphide deposit, Bathurst Mining Camp, 21 O/9, New Brunswick - (ICP-MS)

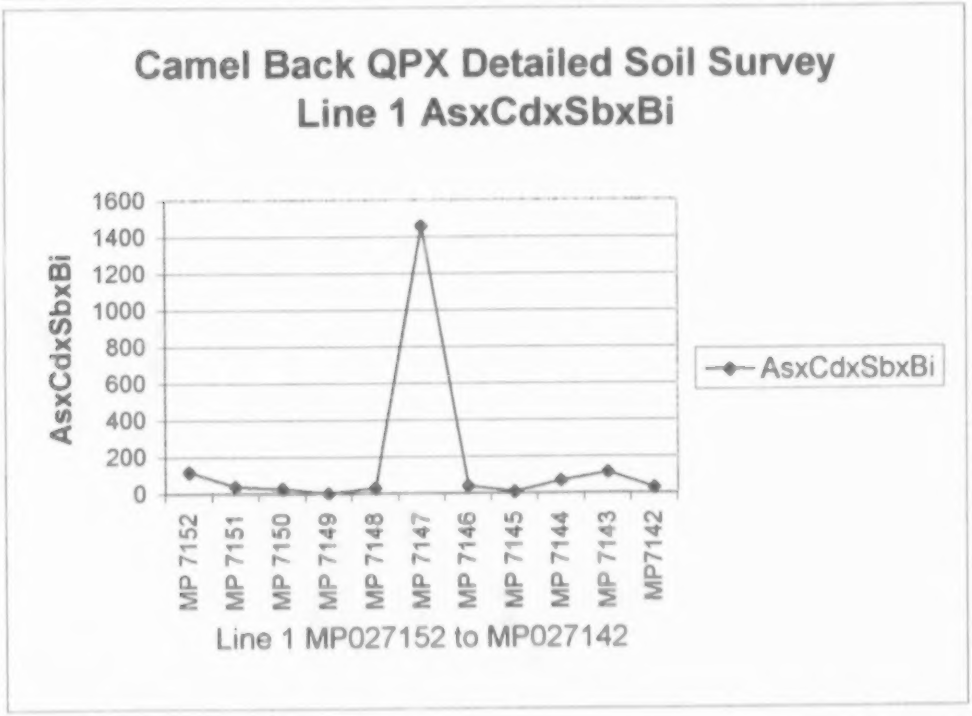
| SAMPLEID | Sb Q | Bi Q | V Q | Ca Q | P Q | La Q | Cr Q | Mg Q | Ba Q | Ti Q | B Q | Al Q | Na Q | K Q | W Q | Sc Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.02 | 0.02 | 2.00 | 0.01 | 0.001 | 0.50 | 0.50 | 0.01 | 0.50 | 0.001 | 1.00 | 0.01 | 0.001 | 0.01 | 0.20 | 0.10 |
| Unit | ppm | ppm | ppm | ppm | pct | ppm | ppm | pct | ppm | pct | ppm | pct | pct | pct | ppm | ppm |
| **Line 1** | | | | | | | | | | | | | | | W | |
| MP027152 | 2.33 | 2.54 | 294.64 | 0.21 | 0.65 | 78.46 | 108.60 | 1.82 | 392.28 | 0.22 | 1.71 | 9.49 | 0.08 | 2.36 | < .1 | 16.79 |
| MP027151 | 1.72 | 1.15 | 205.35 | 0.14 | 0.36 | 53.94 | 116.64 | 1.18 | 290.78 | 0.17 | 2.74 | 10.79 | 0.05 | 1.51 | < .1 | 14.79 |
| MP027150 | 2.03 | 1.63 | 217.94 | 0.15 | 0.27 | 64.17 | 66.59 | 0.82 | 272.13 | 0.19 | 1.51 | 6.90 | 0.06 | 1.51 | < .1 | 11.81 |
| MP027149 | 0.32 | 0.49 | 33.00 | 0.06 | 0.03 | 28.90 | 10.60 | 0.24 | 73.60 | 0.02 | 0.50 | 1.26 | 0.02 | 0.56 | < .1 | 2.70 |
| MP027148 | 2.06 | 1.67 | 150.41 | 0.16 | 0.19 | 67.57 | 52.07 | 1.20 | 261.71 | 0.08 | 1.16 | 5.62 | 0.06 | 1.67 | < .1 | 9.72 |
| MP027147 | 2.65 | 3.10 | 171.19 | 0.32 | 0.44 | 81.07 | 82.69 | 1.52 | 532.63 | 0.11 | 1.62 | 7.17 | 0.06 | 1.78 | < .1 | 12.27 |
| MP027146 | 1.89 | 0.81 | 89.82 | 0.13 | 0.30 | 43.63 | 72.22 | 1.32 | 256.44 | 0.08 | 3.67 | 7.04 | 0.05 | 1.28 | < .1 | 9.53 |
| MP027145 | 1.11 | 0.89 | 158.72 | 0.12 | 0.43 | 41.27 | 65.08 | 0.73 | 211.10 | 0.10 | 0.99 | 5.97 | 0.04 | 1.01 | < .1 | 8.33 |
| MP027144 | 1.76 | 1.68 | 234.17 | 0.20 | 0.53 | 53.19 | 114.48 | 1.42 | 387.97 | 0.24 | 5.78 | 11.39 | 0.09 | 1.88 | < .1 | 14.74 |
| MP027143 | 1.74 | 3.02 | 207.55 | 0.14 | 0.71 | 37.22 | 136.26 | 1.29 | 301.63 | 0.18 | 4.51 | 15.21 | 0.07 | 1.56 | < .1 | 16.24 |
| MP027142 | 1.60 | 1.27 | 191.61 | 0.11 | 0.52 | 38.10 | 83.55 | 1.18 | 252.43 | 0.16 | 4.46 | 10.23 | 0.05 | 1.34 | < .1 | 13.37 |
| **Line 2** | | | | | | | | | | | | | | | | |
| MP027153 | 2.41 | 2.29 | 341.98 | 0.11 | 1.24 | 86.81 | 99.59 | 1.24 | 350.62 | 0.20 | 1.88 | 9.88 | 0.09 | 2.33 | < .1 | 17.29 |
| MP027154 | 1.65 | 1.86 | 350.87 | 0.13 | 0.87 | 45.34 | 151.14 | 1.46 | 324.42 | 0.35 | 2.70 | 13.68 | 0.06 | 1.40 | < .1 | 18.62 |
| MP027155 | 2.04 | 1.76 | 303.11 | 0.12 | 0.66 | 58.77 | 127.43 | 1.55 | 315.49 | 0.24 | 1.55 | 11.29 | 0.06 | 1.73 | < .1 | 17.32 |
| MP027156 | 1.72 | 1.32 | 220.33 | 0.13 | 0.48 | 51.05 | 90.55 | 1.07 | 278.37 | 0.24 | 1.34 | 7.23 | 0.05 | 1.42 | < .1 | 11.02 |
| MP027157 | 1.46 | 2.63 | 181.78 | 0.10 | 0.35 | 75.63 | 80.18 | 0.97 | 316.49 | 0.10 | 1.62 | 8.44 | 0.06 | 2.11 | < .1 | 13.63 |
| MP027158 | 1.60 | 3.12 | 238.13 | 0.16 | 0.87 | 70.80 | 129.69 | 2.03 | 433.46 | 0.10 | 1.61 | 12.20 | 0.08 | 2.64 | < .1 | 16.73 |
| MP027159 | 1.96 | 3.38 | 332.31 | 0.15 | 0.92 | 50.15 | 122.65 | 1.33 | 365.84 | 0.35 | 1.51 | 13.81 | 0.07 | 1.63 | < .1 | 16.01 |
| MP027160 | 1.28 | 1.58 | 142.02 | 0.09 | 0.34 | 35.16 | 66.16 | 0.92 | 197.27 | 0.12 | 0.87 | 8.21 | 0.04 | 1.07 | < .1 | 9.87 |
| MP027161 | 1.42 | 3.54 | 199.52 | 0.16 | 0.63 | 73.37 | 89.46 | 1.48 | 412.87 | 0.14 | 1.61 | 9.24 | 0.08 | 2.19 | < .1 | 16.09 |
| MP027162 | 1.64 | 2.34 | 240.16 | 0.12 | 0.82 | 50.46 | 145.01 | 0.82 | 347.17 | 0.16 | 1.52 | 11.40 | 0.05 | 1.82 | < .1 | 13.68 |
| MP027163 | 2.40 | 1.99 | 321.20 | 0.27 | 0.67 | 59.84 | 99.40 | 1.22 | 293.13 | 0.32 | 1.69 | 8.59 | 0.07 | 1.69 | < .1 | 12.51 |
| **Line 3** | | | | | | | | | | | | | | | | |
| MP027170 | 2.61 | 2.06 | 264.57 | 0.10 | 0.76 | 67.00 | 102.39 | 1.51 | 333.64 | 0.18 | 10.31 | 10.89 | 0.09 | 2.10 | < .1 | 14.09 |
| MP027169 | 1.36 | 1.27 | 148.20 | 0.09 | 0.38 | 61.06 | 60.47 | 0.92 | 275.06 | 0.08 | 2.98 | 6.97 | 0.07 | 1.60 | < .1 | 10.67 |
| MP027168 | 2.58 | 0.41 | 53.70 | 5.29 | 0.33 | 56.77 | 29.15 | 0.77 | 503.47 | 0.02 | 5.11 | 4.17 | 0.05 | 1.13 | < .1 | 11.51 |
| MP027167 | 2.61 | 2.61 | 248.72 | 0.25 | 0.47 | 67.78 | 112.86 | 1.31 | 410.08 | 0.21 | 9.33 | 8.55 | 0.07 | 2.21 | < .1 | 11.50 |
| MP027166 | 2.42 | 1.65 | 309.33 | 0.19 | 1.19 | 60.91 | 108.11 | 1.37 | 310.29 | 0.21 | 12.76 | 11.07 | 0.08 | 1.85 | < .1 | 14.35 |
| MP027165 | 3.04 | 2.97 | 281.93 | 0.15 | 0.62 | 68.04 | 153.37 | 2.52 | 430.78 | 0.21 | 3.76 | 13.27 | 0.09 | 2.52 | < .1 | 16.92 |
| MP027164 | 1.32 | 12.92 | 270.35 | 0.07 | 0.94 | 62.64 | 102.87 | 1.75 | 320.80 | 0.15 | 6.59 | 12.07 | 0.05 | 2.18 | < .1 | 12.20 |
| MP027171 | 3.23 | 2.68 | 312.68 | 0.14 | 0.63 | 52.23 | 150.15 | 2.20 | 395.14 | 0.33 | 6.87 | 11.58 | 0.10 | 2.30 | < .1 | 16.15 |
| MP027172 | 2.36 | 5.36 | 189.46 | 0.16 | 0.53 | 41.87 | 124.90 | 1.17 | 330.97 | 0.15 | 7.02 | 16.21 | 0.05 | 1.47 | 0.10 | 13.10 |
| MP027173 | 1.28 | 1.37 | 137.43 | 0.06 | 0.23 | 32.92 | 57.21 | 0.86 | 203.27 | 0.12 | 3.20 | 7.41 | 0.03 | 0.99 | < .1 | 9.59 |
| MP027174 | 2.64 | 2.22 | 278.81 | 0.18 | 0.37 | 53.36 | 81.25 | 1.17 | 288.11 | 0.33 | 6.00 | 8.69 | 0.06 | 1.83 | < .1 | 12.29 |

Appendix 5a. QPX B-horizon soil geochemistry, Camel Back massive sulphide deposit, Bathurst Mining Camp, 21 O/9, New Brunswick - (ICP-MS)

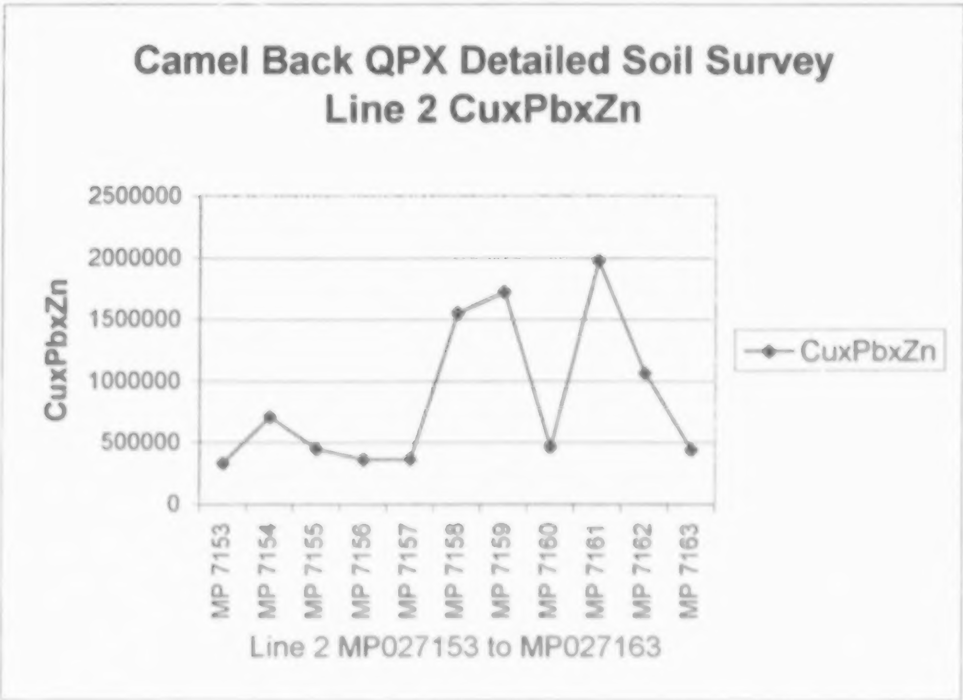
| SAMPLEID | Tl Q | S Q | Hg Q | Se Q | Te Q | Ga Q |
|---|---|---|---|---|---|---|
| Det. Limit | 0.02 | 0.01 | 5.00 | 0.10 | 0.02 | 0.10 |
| Unit | ppm | pct | ppb | ppm | ppm | ppm |
| Line 1 | | | Hg | | | |
| MP027152 | 1.78 | 0.10 | < 5 | 0.17 | 0.03 | 51.73 |
| MP027151 | 0.60 | 0.11 | < 5 | 1.10 | [illegible] | [illegible] |
| MP027150 | 1.27 | 0.03 | < 5 | 0.15 | [illegible] | [illegible] |
| MP027149 | 0.32 | 0.01 | < 5 | 0.05 | 0.01 | 6.10 |
| MP027148 | 1.16 | 0.02 | < 5 | 0.12 | 0.02 | 26.38 |
| MP027147 | 1.23 | 0.03 | < 5 | 0.65 | 0.03 | 34.88 |
| MP027146 | 0.57 | 0.01 | < 5 | 0.55 | 0.04 | 17.05 |
| MP027145 | 0.50 | 0.01 | < 5 | 0.40 | 0.02 | 24.01 |
| MP027144 | 1.07 | 0.01 | < 5 | 0.58 | 0.09 | 43.08 |
| MP027143 | 0.72 | 0.02 | < 5 | 1.13 | 0.02 | 38.80 |
| MP027142 | 0.69 | 0.02 | < 5 | 0.89 | 0.04 | 38.99 |
| Line 2 | | | | | | |
| MP027153 | 1.50 | 0.15 | < 5 | 0.75 | 0.04 | 57.50 |
| MP027154 | 0.49 | 0.16 | < 5 | 1.35 | 0.03 | 57.22 |
| MP027155 | 0.84 | 0.09 | < 5 | 0.93 | 0.06 | 51.96 |
| MP027156 | 0.73 | 0.13 | < 5 | 0.27 | 0.03 | 37.08 |
| MP027157 | 1.04 | 0.03 | < 5 | 0.97 | 0.03 | 43.17 |
| MP027158 | 1.03 | 0.13 | < 5 | 0.97 | 0.03 | 54.71 |
| MP027159 | 0.69 | 0.15 | < 5 | 1.51 | 0.09 | 61.33 |
| MP027160 | 0.38 | 0.07 | < 5 | 0.69 | 0.02 | 27.89 |
| MP027161 | 1.03 | 0.16 | < 5 | 0.32 | 0.03 | 51.49 |
| MP027162 | 0.55 | 0.06 | < 5 | 1.52 | 0.09 | 46.82 |
| MP027163 | 0.95 | 0.14 | < 5 | 0.17 | 0.03 | 51.73 |
| Line 3 | | | | | | |
| MP027170 | 1.24 | 0.10 | < 5 | 1.37 | 0.10 | 54.98 |
| MP027169 | 1.10 | 0.06 | < 5 | 0.15 | 0.03 | 36.75 |
| MP027168 | 0.15 | 0.43 | < 5 | 1.53 | 0.03 | 15.34 |
| MP027167 | 0.72 | 0.03 | < 5 | 0.93 | 0.03 | 47.26 |
| MP027166 | 0.80 | 0.03 | < 5 | 0.64 | 0.03 | 47.20 |
| MP027165 | 1.01 | 0.19 | < 5 | 0.75 | 0.11 | 49.99 |
| MP027164 | 0.92 | 0.30 | < 5 | 1.32 | 0.07 | 60.01 |
| MP027171 | 1.03 | 0.10 | < 5 | 0.69 | 0.03 | 55.66 |
| MP027172 | 0.37 | 0.12 | < 5 | 2.34 | 0.02 | 39.30 |
| MP027173 | 0.48 | 0.02 | < 5 | 0.80 | 0.03 | 25.73 |
| MP027174 | 1.02 | 0.09 | < 5 | 0.60 | 0.06 | 50.07 |

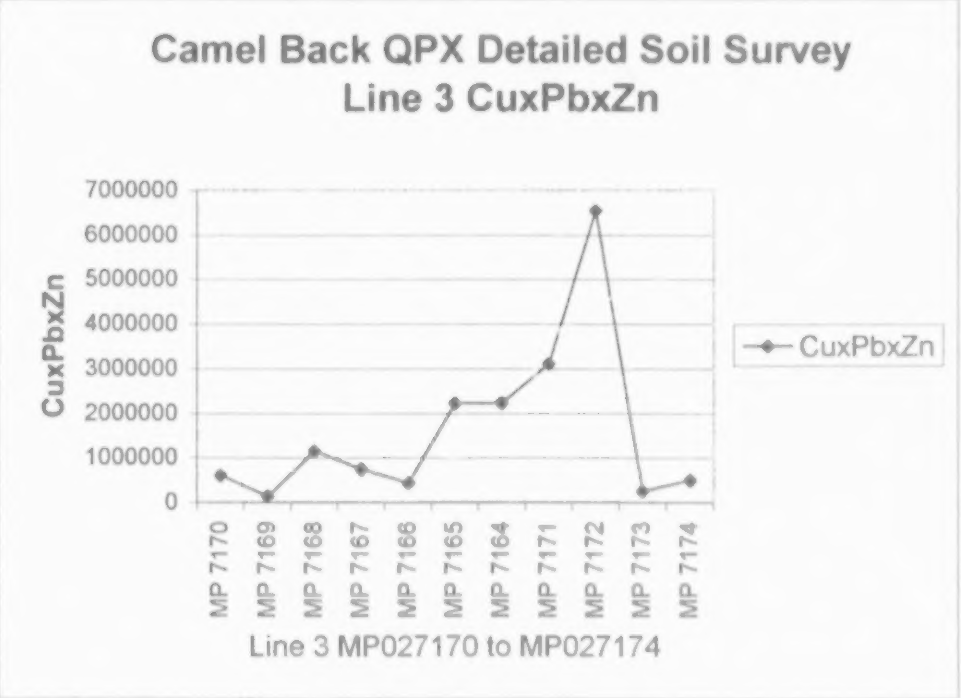
Appendix 5b. Profile Plots, QPX B-horizon soil goechemistry, Camel Back massive sulphide deposit, Bathurst Mining Camp, 21 O/9, New Brunswick - (ICP-MS)



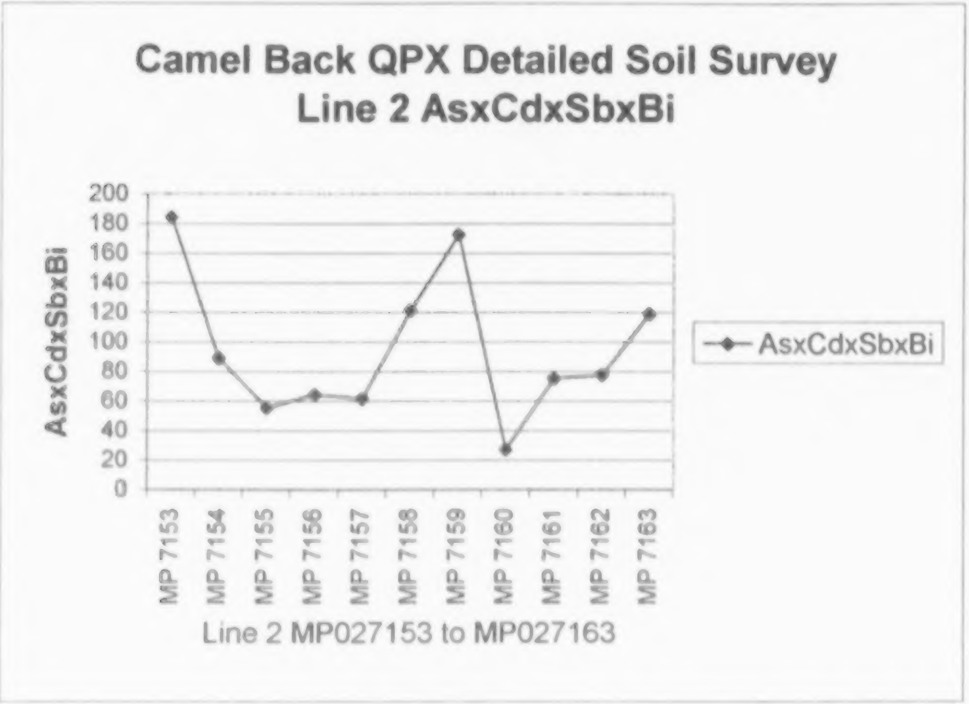


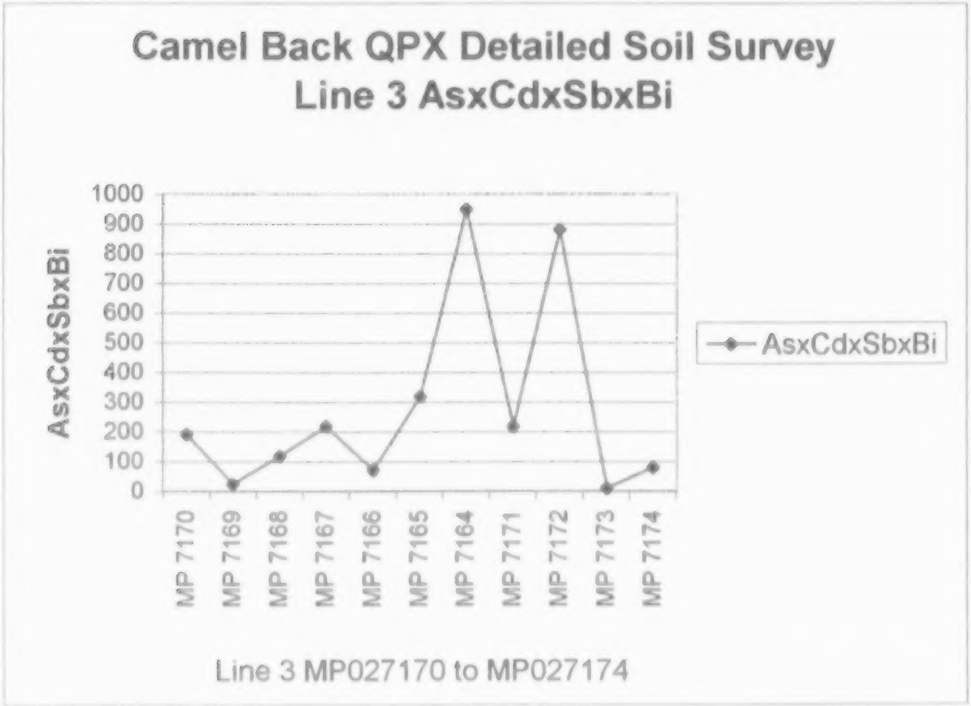
Appendix 5b. Profile Plots, QPX B-horizon soil goechemistry, Camel Back massive sulphide deposit, Bathurst Mining Camp, 21 O/9, New Brunswick - (ICP-MS)





Appendix 5b. Profile Plots, QPX B-horizon soil goechemistry, Camel Back massive sulphide deposit, Bathurst Mining Camp, 21 O/9, New Brunswick - (ICP-MS)





## Appendix 6a. QPVX bark sample geochemistry, Taylor Brook Road, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

| SAMPLEID | Mo Q | Cu Q | Pb Q | Zn Q | Ag Q | Ni Q | Co Q | Mn Q | Fe Q | As Q | U Q | Au Q | Th Q | Sr Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.01 | 0.01 | 0.01 | 0.10 | 2.00 | 0.10 | 0.01 | 1.00 | 0.001 | 0.10 | 0.01 | 0.20 | 0.01 | 0.50 |
| Unit | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | pct | ppm | ppm | ppb | ppm | ppm |
| MP027175 | 1.28 | 146.10 | 876.89 | 2598.70 | 2117.00 | 19.90 | 17.90 | 12187.00 | 2.04 | 53.90 | 0.30 | 127.30 | 1.10 | 568.80 |
| MP027176 | 1.98 | 240.69 | 1261.16 | 3355.60 | 3384.00 | 21.60 | 27.20 | 20199.00 | 3.02 | 79.60 | 0.40 | 347.30 | 1.00 | 590.90 |
| MP027177 | 1.52 | 176.23 | 867.72 | 3039.60 | 2083.00 | 20.10 | 21.10 | 17160.00 | 2.02 | 56.30 | 0.40 | 405.10 | 1.00 | 572.10 |
| MP027178 | 1.68 | 175.08 | 1142.32 | 3802.10 | 2091.00 | 20.70 | 22.70 | 13532.00 | 2.32 | 60.10 | 0.40 | 333.70 | 1.30 | 657.60 |
| MP027179 | 1.41 | 170.15 | 951.47 | 2814.20 | 1563.00 | 17.90 | 18.50 | 10522.00 | 1.87 | 38.20 | 0.40 | 101.20 | 1.00 | 613.30 |
| MP027180 | 1.49 | 177.34 | 1019.79 | 4165.90 | 2041.00 | 24.40 | 20.50 | 8404.00 | 1.97 | 56.80 | 0.40 | 285.80 | 0.80 | 714.80 |
| MP027181 | 1.67 | 176.65 | 1295.25 | 3909.50 | 2241.00 | 22.60 | 19.70 | 4706.00 | 2.36 | 56.60 | 0.50 | 187.50 | 1.00 | 1030.30 |
| MP027182 | 1.58 | 202.33 | 1295.17 | 2959.30 | 2420.00 | 22.30 | 26.30 | 23369.00 | 2.55 | 61.70 | 0.50 | 855.70 | 1.10 | 473.90 |
| MP027183 | 1.52 | 237.17 | 1038.63 | 2643.90 | 2035.00 | 23.30 | 22.90 | 23147.00 | 2.38 | 71.80 | 0.40 | 373.90 | 1.20 | 595.40 |
| MP027184 | 1.23 | 174.30 | 941.19 | 2492.50 | 2036.00 | 30.00 | 17.10 | 7289.00 | 2.68 | 49.80 | 0.50 | 139.10 | 2.00 | 584.50 |
| MP027185 | 2.77 | 451.04 | 754.49 | 1989.70 | 1297.00 | 25.00 | 14.50 | 7762.00 | 1.60 | 37.00 | 0.40 | 306.50 | 1.30 | 1115.90 |
| MP027186 | 1.84 | 230.56 | 847.58 | 2081.20 | 1718.00 | 20.60 | 17.40 | 5120.00 | 2.29 | 78.50 | 0.40 | 301.20 | 1.80 | 1000.20 |
| MP027187 | 1.95 | 221.62 | 1208.96 | 2634.20 | 2800.00 | 27.10 | 27.80 | 21108.00 | 3.33 | 77.30 | 0.60 | 444.70 | 1.90 | 594.30 |
| MP027188 | 1.67 | 222.13 | 1466.48 | 3149.20 | 3554.00 | 26.20 | 23.40 | 19085.00 | 3.43 | 87.00 | 0.50 | 170.10 | 1.60 | 609.30 |
| MP027189 | 1.31 | 173.01 | 782.41 | 2956.30 | 1872.00 | 21.80 | 15.40 | 15186.00 | 1.96 | 50.40 | 0.30 | 318.10 | 1.00 | 1058.50 |
| MP027190 | 1.10 | 177.22 | 538.38 | 2093.10 | 1286.00 | 15.30 | 10.20 | 16489.00 | 1.28 | 34.00 | 0.20 | 421.70 | 0.70 | 1283.50 |
| MP027191 | 1.20 | 220.61 | 818.64 | 1745.70 | 1366.00 | 23.10 | 18.30 | 20439.00 | 1.70 | 36.70 | 0.30 | 207.70 | 1.00 | 891.70 |
| MP027192 | 1.10 | 253.34 | 469.99 | 1654.40 | 1011.00 | 21.10 | 14.40 | 17061.00 | 1.26 | 38.00 | 0.20 | 330.40 | 0.70 | 1274.80 |
| MP027193 | 1.68 | 284.88 | 931.87 | 2772.60 | 1573.00 | 28.60 | 28.80 | 42645.00 | 1.98 | 49.50 | 0.40 | 274.90 | 1.10 | 764.80 |
| MP027194 | 1.19 | 165.05 | 490.56 | 1888.60 | 1027.00 | 11.50 | 10.10 | 35938.00 | 1.04 | 31.60 | 0.10 | 291.80 | 0.40 | 702.60 |
| MP027195 | 2.51 | 245.75 | 2530.80 | 3834.20 | 3544.00 | 37.60 | 28.90 | 12222.00 | 4.38 | 81.00 | 0.60 | 823.80 | 2.10 | 330.30 |
| MP027196 | 1.93 | 164.42 | 1156.72 | 2284.30 | 2766.00 | 37.10 | 21.40 | 9891.00 | 3.73 | 70.10 | 0.70 | 60.50 | 2.30 | 275.10 |
| MP027197 | 1.50 | 228.85 | 1225.38 | 2642.30 | 2676.00 | 23.40 | 18.80 | 21204.00 | 2.86 | 66.00 | 0.40 | 224.30 | 1.20 | 655.30 |
| MP027198 | 1.54 | 233.34 | 808.89 | 2881.70 | 1878.00 | 23.20 | 23.80 | 33185.00 | 2.12 | 49.50 | 0.40 | 174.90 | 1.20 | 691.30 |
| MP027199 | 2.06 | 202.09 | 1587.45 | 3219.40 | 3619.00 | 35.10 | 27.60 | 10437.00 | 4.33 | 93.90 | 0.70 | 420.70 | 2.40 | 284.60 |
| MP027200 | 1.79 | 206.53 | 1615.11 | 3075.70 | 3154.00 | 30.10 | 24.90 | 11701.00 | 4.13 | 90.80 | 0.70 | 273.60 | 2.30 | 296.40 |
| MP027201 | 1.70 | 218.28 | 942.31 | 2565.20 | 2290.00 | 39.10 | 23.30 | 12208.00 | 3.30 | 55.20 | 0.70 | 348.70 | 2.40 | 312.20 |
| MP027202 | 1.78 | 192.95 | 732.81 | 2200.10 | 2099.00 | 37.70 | 21.50 | 16618.00 | 2.87 | 52.90 | 0.70 | 609.40 | 2.10 | 326.50 |
| MP027203 | 1.10 | 206.91 | 478.87 | 2776.70 | 1150.00 | 22.30 | 13.20 | 13722.00 | 1.53 | 32.40 | 0.40 | 140.70 | 1.40 | 994.80 |
| MP027204 | 1.32 | 330.85 | 977.92 | 3033.90 | 2253.00 | 21.80 | 20.90 | 18534.00 | 1.78 | 57.20 | 0.20 | 56.90 | 0.50 | 958.30 |
| MP027205 | 1.37 | 230.06 | 1283.65 | 3645.20 | 2504.00 | 25.20 | 17.70 | 13455.00 | 2.41 | 45.30 | 0.40 | 618.50 | 1.20 | 746.80 |
| MP027206 | 0.86 | 210.36 | 594.87 | 2089.70 | 1087.00 | 17.70 | 11.50 | 18500.00 | 1.08 | 24.50 | 0.20 | 404.10 | 0.70 | 870.90 |

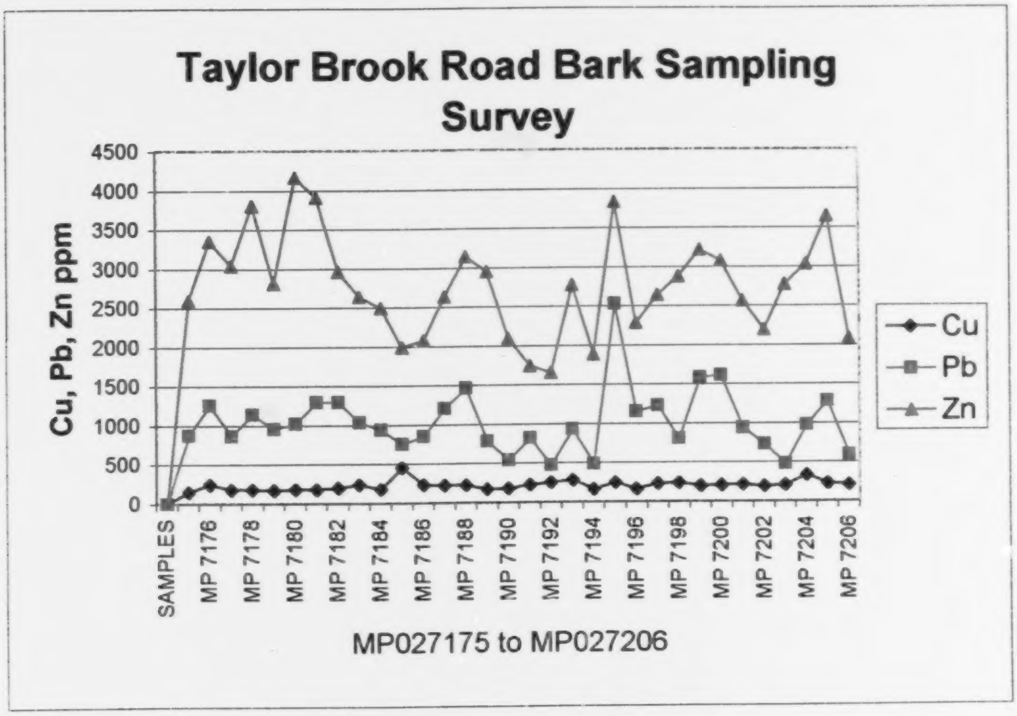
## Appendix 6a. QPVX bark sample geochemistry, Taylor Brook Road, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

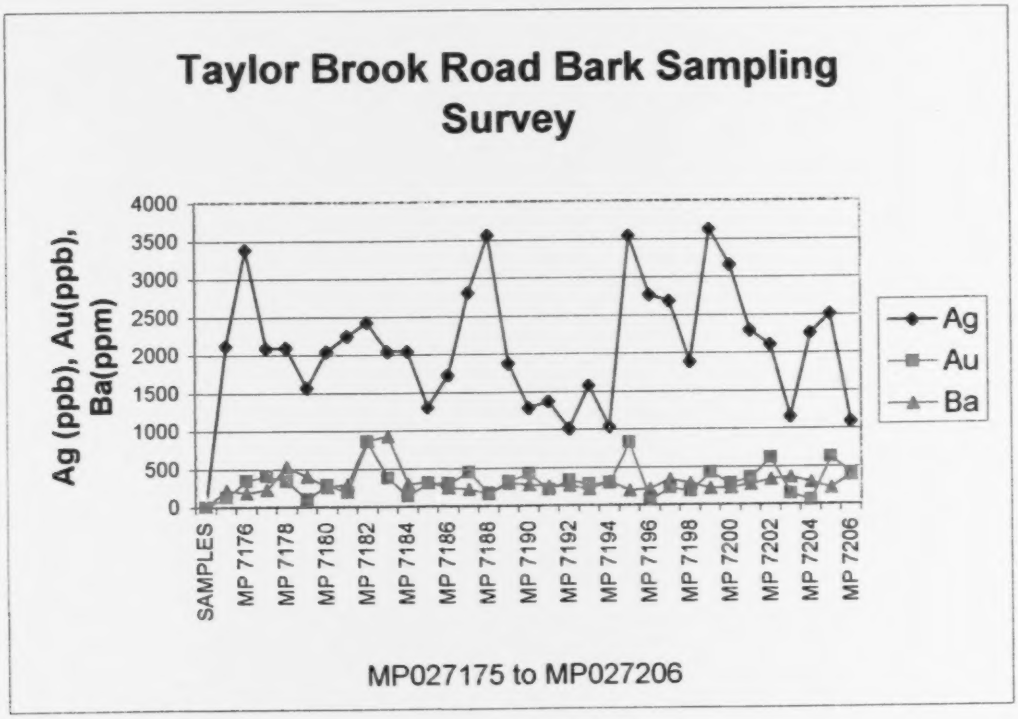
| SAMPLEID | Cd Q | Sb Q | Bi Q | V Q | Ca Q | P Q | La Q | Cr Q | Mg Q | Ba Q | Ti Q | B Q | Al Q | Na Q | K Q | W Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.01 | 0.02 | 0.02 | 2.00 | 0.01 | 0.001 | 0.01 | 0.05 | 0.001 | 0.10 | 0.0001 | 1.00 | 0.01 | 0.001 | 0.01 | 0.10 |
| Unit | ppm | ppm | ppm | ppm | ppm | pct | ppm | ppm | pct | ppm | pct | ppm | pct | pct | pct | ppm |
| MP027175 | 12.41 | 11.10 | 3.74 | 21.00 | 26.05 | 0.39 | 4.20 | 19.30 | 0.48 | 224.00 | 0.02 | 110.00 | 0.52 | 0.06 | 1.32 | 0.20 |
| MP027176 | 20.82 | 19.64 | 6.35 | 29.00 | 21.46 | 0.55 | 3.90 | 15.60 | 0.51 | 184.90 | 0.02 | 120.00 | 0.52 | 0.05 | 1.77 | 0.30 |
| MP027177 | 14.50 | 13.75 | 4.13 | 26.00 | 23.54 | 0.47 | 3.70 | 17.10 | 0.51 | 228.80 | 0.02 | 106.00 | 0.48 | 0.05 | 1.79 | 0.20 |
| MP027178 | 11.55 | 15.42 | 4.75 | 27.00 | 24.43 | 0.47 | 5.00 | 22.70 | 0.62 | 526.40 | 0.02 | 113.00 | 0.57 | 0.04 | 1.58 | 0.20 |
| MP027179 | 17.69 | 11.36 | 3.87 | 23.00 | 25.10 | 0.49 | 4.50 | 16.90 | 0.55 | 396.00 | 0.01 | 104.00 | 0.51 | 0.05 | 1.97 | 0.20 |
| MP027180 | 19.21 | 16.34 | 4.78 | 25.00 | 28.02 | 0.46 | 4.00 | 17.20 | 0.56 | 255.80 | 0.01 | 123.00 | 0.48 | 0.08 | 1.90 | 0.20 |
| MP027181 | 12.29 | 18.14 | 5.47 | 26.00 | 25.29 | 0.36 | 4.80 | 22.90 | 0.44 | 300.70 | 0.01 | 83.00 | 0.57 | 0.05 | 1.39 | 0.30 |
| MP027182 | 23.19 | 15.46 | 6.06 | 28.00 | 21.09 | 0.55 | 5.50 | 19.60 | 0.76 | 867.50 | 0.02 | 125.00 | 0.68 | 0.04 | 2.26 | 0.20 |
| MP027183 | 13.88 | 13.75 | 5.10 | 26.00 | 20.87 | 0.59 | 5.30 | 16.90 | 0.77 | 925.80 | 0.01 | 123.00 | 0.65 | 0.04 | 2.00 | 0.20 |
| MP027184 | 17.92 | 11.41 | 4.06 | 28.00 | 19.49 | 0.57 | 8.90 | 23.80 | 0.79 | 295.20 | 0.02 | 93.00 | 1.14 | 0.03 | 1.89 | 0.20 |
| MP027185 | 11.09 | 5.83 | 2.51 | 16.00 | 22.77 | 0.77 | 5.60 | 20.00 | 1.92 | 313.40 | 0.02 | 172.00 | 0.71 | 0.03 | 3.18 | 0.10 |
| MP027186 | 15.01 | 10.52 | 3.79 | 25.00 | 22.45 | 0.48 | 6.70 | 22.60 | 1.16 | 247.70 | 0.02 | 125.00 | 0.87 | 0.04 | 1.78 | 0.20 |
| MP027187 | 18.52 | 16.90 | 5.95 | 44.00 | 17.50 | 0.55 | 8.10 | 20.10 | 0.69 | 218.40 | 0.02 | 108.00 | 1.14 | 0.05 | 1.56 | 0.20 |
| MP027188 | 23.18 | 17.28 | 6.24 | 30.00 | 20.55 | 0.58 | 7.10 | 21.40 | 0.54 | 163.80 | 0.02 | 99.00 | 0.91 | 0.05 | 1.19 | 0.20 |
| MP027189 | 17.43 | 12.01 | 3.95 | 22.00 | 26.02 | 0.53 | 4.30 | 16.20 | 0.56 | 298.90 | 0.01 | 122.00 | 0.58 | 0.05 | 1.83 | 0.20 |
| MP027190 | 12.19 | 8.64 | 2.38 | 15.00 | 26.73 | 0.52 | 3.40 | 10.10 | 0.89 | 278.50 | 0.01 | 117.00 | 0.42 | 0.05 | 2.35 | 0.10 |
| MP027191 | 15.84 | 7.85 | 3.10 | 21.00 | 20.84 | 0.72 | 5.50 | 15.50 | 1.50 | 248.30 | 0.01 | 134.00 | 0.64 | 0.03 | 2.38 | 0.20 |
| MP027192 | 7.45 | 7.94 | 2.36 | 23.00 | 27.24 | 0.80 | 3.30 | 8.70 | 2.01 | 258.00 | 0.01 | 181.00 | 0.33 | 0.03 | 2.08 | 0.20 |
| MP027193 | 26.57 | 11.07 | 4.53 | 33.00 | 17.91 | 1.27 | 5.20 | 17.50 | 1.37 | 212.80 | 0.01 | 136.00 | 0.74 | 0.07 | 4.85 | 0.20 |
| MP027194 | 10.80 | 6.17 | 2.24 | 13.00 | 22.86 | 0.68 | 2.10 | 8.80 | 1.08 | 315.30 | 0.01 | 138.00 | 0.21 | 0.04 | 5.76 | 0.20 |
| MP027195 | 16.61 | 25.18 | 8.34 | 43.00 | 16.78 | 0.45 | 11.20 | 31.80 | 0.56 | 191.30 | 0.02 | 80.00 | 1.44 | 0.05 | 0.98 | 0.30 |
| MP027196 | 9.20 | 14.66 | 5.58 | 40.00 | 13.98 | 0.40 | 12.10 | 35.70 | 0.47 | 211.20 | 0.02 | 54.00 | 1.38 | 0.06 | 0.89 | 0.20 |
| MP027197 | 10.95 | 14.24 | 4.96 | 27.00 | 20.33 | 0.75 | 6.00 | 14.50 | 0.90 | 333.30 | 0.02 | 101.00 | 0.70 | 0.04 | 2.13 | 0.20 |
| MP027198 | 19.51 | 12.54 | 4.70 | 32.00 | 21.30 | 0.61 | 6.00 | 17.50 | 0.70 | 280.50 | 0.01 | 146.00 | 0.63 | 0.05 | 2.13 | 0.30 |
| MP027199 | 10.82 | 22.72 | 7.72 | 43.00 | 14.59 | 0.38 | 12.90 | 29.80 | 0.47 | 217.00 | 0.02 | 70.00 | 1.41 | 0.05 | 0.96 | 0.20 |
| MP027200 | 9.76 | 20.73 | 6.89 | 42.00 | 16.04 | 0.40 | 12.00 | 24.40 | 0.43 | 224.60 | 0.02 | 70.00 | 1.37 | 0.05 | 0.96 | 0.30 |
| MP027201 | 10.47 | 13.56 | 4.67 | 55.00 | 15.39 | 0.41 | 14.20 | 26.80 | 0.51 | 266.60 | 0.03 | 71.00 | 1.64 | 0.06 | 0.90 | 0.20 |
| MP027202 | 10.48 | 10.43 | 4.10 | 46.00 | 16.15 | 0.45 | 12.80 | 27.00 | 0.55 | 331.30 | 0.02 | 101.00 | 1.59 | 0.08 | 1.00 | 0.20 |
| MP027203 | 15.63 | 7.15 | 2.68 | 26.00 | 22.11 | 0.54 | 7.00 | 19.60 | 0.84 | 356.30 | 0.01 | 146.00 | 0.95 | 0.08 | 3.00 | 0.20 |
| MP027204 | 24.50 | 13.96 | 5.22 | 23.00 | 24.62 | 1.17 | 3.30 | 8.90 | 0.72 | 290.80 | 0.01 | 133.00 | 0.77 | 0.06 | 2.76 | 0.10 |
| MP027205 | 11.83 | 14.32 | 5.37 | 32.00 | 21.42 | 0.63 | 6.30 | 16.40 | 0.82 | 212.00 | 0.01 | 106.00 | 1.12 | 0.05 | 1.24 | 0.30 |
| MP027206 | 6.78 | 6.12 | 2.15 | 14.00 | 25.23 | 0.65 | 3.60 | 8.00 | 1.28 | 388.20 | 0.01 | 103.00 | 0.41 | 0.04 | 2.48 | 0.20 |

## Appendix 6a. QPVX bark sample geochemistry, Taylor Brook Road, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)

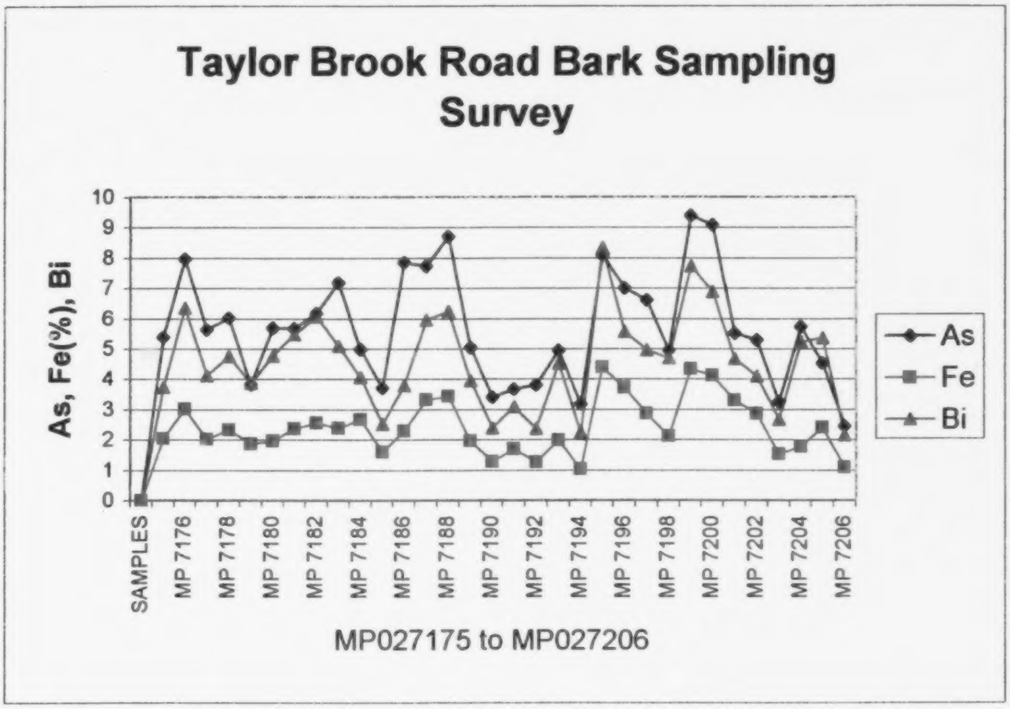
| SAMPLEID | Sc Q | Tl Q | S Q | Hg Q | Se Q | Te Q | Ga Q |
|---|---|---|---|---|---|---|---|
| Det. Limit | 0.10 | 0.02 | 0.01 | 1.00 | 0.10 | 0.02 | 0.10 |
| Unit | ppm | ppm | pct | ppb | ppm | ppm | ppm |
| MP027175 | 1.10 | 1.87 | 1.51 | 17.00 | 1.00 | 0.11 | 1.90 |
| MP027176 | 1.50 | 3.82 | 2.16 | 6.00 | 1.30 | 0.06 | 2.50 |
| MP027177 | 1.20 | 3.12 | 1.52 | < 5 | 0.90 | 0.09 | 2.20 |
| MP027178 | 1.50 | 3.14 | 1.57 | < 5 | 0.90 | 0.10 | 2.40 |
| MP027179 | 1.30 | 2.34 | 1.36 | < 5 | 0.90 | 0.08 | 1.90 |
| MP027180 | 1.10 | 3.61 | 1.51 | < 5 | 1.20 | 0.10 | 1.80 |
| MP027181 | 1.50 | 3.23 | 1.43 | 11.00 | 0.70 | 0.17 | 2.00 |
| MP027182 | 2.00 | 4.90 | 1.59 | < 5 | 0.60 | 0.10 | 2.70 |
| MP027183 | 2.00 | 3.04 | 1.66 | 14.00 | 0.90 | 0.07 | 2.70 |
| MP027184 | 2.20 | 1.98 | 1.40 | 5.00 | 0.90 | 0.04 | 3.20 |
| MP027185 | 1.90 | 1.17 | 1.17 | < 5 | 1.30 | 0.15 | 2.20 |
| MP027186 | 1.80 | 2.06 | 1.46 | < 5 | 0.70 | 0.11 | 2.70 |
| MP027187 | 2.10 | 4.09 | 1.60 | 7.00 | 1.30 | 0.11 | 4.00 |
| MP027188 | 1.90 | 2.74 | 1.97 | < 5 | 1.20 | 0.09 | 3.60 |
| MP027189 | 1.30 | 2.63 | 1.44 | 6.00 | 0.90 | 0.16 | 2.20 |
| MP027190 | 1.10 | 1.63 | 1.02 | < 5 | 0.70 | 0.14 | 1.60 |
| MP027191 | 1.50 | 2.87 | 1.07 | < 5 | 1.50 | 0.17 | 2.40 |
| MP027192 | 1.10 | 1.47 | 1.22 | 8.00 | 1.20 | 0.14 | 1.60 |
| MP027193 | 2.00 | 5.56 | 1.38 | 13.00 | 1.50 | 0.11 | 3.40 |
| MP027194 | 1.10 | 2.03 | 0.95 | 5.00 | 0.80 | 0.15 | 1.90 |
| MP027195 | 2.10 | 4.12 | 1.73 | 5.00 | 1.50 | 0.08 | 4.10 |
| MP027196 | 2.70 | 2.87 | 1.55 | 7.00 | 1.10 | 0.07 | 4.40 |
| MP027197 | 1.70 | 2.58 | 1.72 | 5.00 | 1.20 | 0.10 | 3.00 |
| MP027198 | 1.80 | 3.60 | 1.32 | 6.00 | 1.20 | 0.10 | 3.00 |
| MP027199 | 2.70 | 5.05 | 1.66 | 7.00 | 0.90 | 0.06 | 4.60 |
| MP027200 | 2.50 | 4.05 | 1.57 | 5.00 | 1.00 | 0.08 | 4.30 |
| MP027201 | 3.00 | 2.76 | 1.62 | 5.00 | 1.50 | 0.06 | 5.00 |
| MP027202 | 3.40 | 2.03 | 1.64 | 5.00 | 1.30 | 0.09 | 4.90 |
| MP027203 | 2.70 | 1.16 | 1.31 | < 5 | 0.80 | 0.17 | 3.10 |
| MP027204 | 1.00 | 2.82 | 1.38 | < 5 | 0.90 | 0.16 | 2.10 |
| MP027205 | 1.60 | 2.58 | 1.65 | 10.00 | 1.30 | 0.10 | 3.00 |
| MP027206 | 1.70 | 0.93 | 1.01 | 5.00 | 0.40 | 0.15 | 1.70 |

Appendix 6b. Profile plots, QPVX bark sample geochemistry, Taylor Brook Road, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)





Appendix 6b. Profile plots, QPVX bark sample geochemistry, Taylor Brook Road, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS)



# Appendix 7a. Conventional geochemical analysis of B-horizon soil samples, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-ES)

| SAMPLEID | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P | La | Cr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 1 | 1 | 3 | 1 | 0.3 | 1 | 1 | 2 | 0.01 | 2 | 8 | 2 | 2 | 1 | 0.5 | 3 | 3 | 1 | 0.01 | 0.001 | 1 | 1 |
| units | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | pct | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | pct | pct | ppm | ppm |
| **Line 1** | | | | | | | | | | | | | | | | | | | | | | |
| MP027056 | 1 | 5 | 8 | 35 | < .3 | 8 | 3 | 97 | 2.21 | 5 | < 8 | < 2 | 6 | 2 | < .5 | < 3 | < 3 | 29 | 0.02 | 0.075 | 12 | 20 |
| MP027055 | < 1 | 5 | 10 | 25 | < .3 | 8 | 2 | 95 | 1.92 | 7 | < 8 | < 2 | 4 | 3 | < .5 | < 3 | < 3 | 27 | 0.03 | 0.033 | 15 | 20 |
| MP027054 | < 1 | 20 | 6 | 26 | < .3 | 7 | 2 | 74 | 3.29 | 3 | < 8 | < 2 | 19 | 1 | 0.7 | < 3 | < 3 | 42 | 0.01 | 0.114 | 20 | 42 |
| MP027053 | 2 | 17 | 19 | 46 | < .3 | 20 | 4 | 182 | 5.08 | 14 | < 8 | < 2 | 4 | 3 | < .5 | < 3 | < 3 | 63 | 0.02 | 0.063 | 14 | 40 |
| MP027052 | 1 | 12 | 13 | 42 | 0.3 | 15 | 4 | 160 | 2.72 | 10 | < 8 | < 2 | 9 | 3 | < .5 | < 3 | < 3 | 36 | 0.02 | 0.068 | 14 | 27 |
| MP027051 | 1 | 7 | 12 | 27 | < .3 | 7 | 1 | 62 | 2.5 | 7 | < 8 | < 2 | 5 | 2 | < .5 | < 3 | < 3 | 34 | 0.02 | 0.046 | 12 | 21 |
| MP027050 | < 1 | 10 | 15 | 33 | < .3 | 12 | 3 | 139 | 2.27 | 8 | < 8 | < 2 | 9 | 3 | < .5 | < 3 | < 3 | 32 | 0.03 | 0.032 | 15 | 27 |
| MP027057 | 1 | 7 | 10 | 39 | < .3 | 14 | 5 | 174 | 2.32 | 7 | < 8 | < 2 | 2 | 3 | < .5 | < 3 | < 3 | 32 | 0.01 | 0.032 | 15 | 27 |
| MP027058 | < 1 | 3 | 14 | 33 | < .3 | 10 | 5 | 165 | 2.13 | 11 | < 8 | < 2 | 4 | 4 | < .5 | < 3 | < 3 | 37 | 0.04 | 0.023 | 14 | 23 |
| MP027059 | 1 | 4 | 16 | 28 | < .3 | 5 | 6 | 823 | 1.24 | 16 | < 8 | < 2 | 2 | 10 | < .5 | < 3 | < 3 | 27 | 0.19 | 0.017 | 18 | 9 |
| MP027060 | 1 | 5 | 9 | 28 | < .3 | 10 | 2 | 132 | 2.74 | 11 | < 8 | < 2 | 4 | 3 | < .5 | < 3 | < 3 | 47 | 0.02 | 0.018 | 16 | 22 |
| MP027061 | < 1 | 9 | 15 | 44 | 0.4 | 17 | 4 | 162 | 2.84 | 27 | < 8 | < 2 | 5 | 3 | < .5 | < 3 | < 3 | 34 | 0.03 | 0.073 | 13 | 29 |
| MP027062 | < 1 | 8 | 12 | 78 | 0.3 | 11 | 5 | 351 | 2.75 | 17 | < 8 | < 2 | 4 | 4 | < .5 | < 3 | < 3 | 33 | 0.05 | 0.098 | 17 | 25 |
| **Line 2** | | | | | | | | | | | | | | | | | | | | | | |
| MP027049 | 2 | 10 | 13 | 23 | < .3 | 12 | 3 | 121 | 3.88 | 9 | < 8 | < 2 | 3 | 3 | < .5 | < 3 | < 3 | 50 | 0.04 | 0.039 | 14 | 34 |
| MP027048 | 1 | 11 | 13 | 36 | < .3 | 14 | 5 | 168 | 3.11 | 6 | < 8 | < 2 | 6 | 3 | < .5 | < 3 | < 3 | 37 | 0.03 | 0.05 | 15 | 37 |
| MP027047 | 1 | 6 | 13 | 40 | < .3 | 10 | 2 | 102 | 2.9 | 9 | < 8 | < 2 | 4 | 3 | < .5 | < 3 | < 3 | 36 | 0.02 | 0.094 | 14 | 25 |
| MP027046 | < 1 | 9 | 13 | 40 | 0.3 | 17 | 4 | 197 | 2.6 | 6 | < 8 | < 2 | < 2 | 5 | < .5 | < 3 | < 3 | 28 | 0.04 | 0.045 | 15 | 29 |
| MP027045 | < 1 | 5 | 8 | 31 | < .3 | 13 | 3 | 162 | 1.83 | 5 | < 8 | < 2 | 3 | 3 | < .5 | < 3 | < 3 | 27 | 0.04 | 0.023 | 15 | 22 |
| MP027044 | < 1 | 3 | 5 | 14 | < .3 | 4 | 1 | 48 | 0.58 | 3 | < 8 | < 2 | < 2 | 3 | < .5 | < 3 | < 3 | 15 | 0.02 | 0.016 | 16 | 8 |
| MP027043 | 1 | 10 | 16 | 42 | < .3 | 12 | 4 | 134 | 3.16 | 20 | < 8 | < 2 | 3 | 4 | < .5 | < 3 | < 3 | 40 | 0.03 | 0.074 | 19 | 24 |
| MP027042 | 1 | 8 | 11 | 42 | < .3 | 14 | 4 | 188 | 2.59 | 10 | < 8 | < 2 | 5 | 4 | < .5 | < 3 | < 3 | 31 | 0.04 | 0.054 | 18 | 21 |
| MP027041 | 1 | 10 | 13 | 71 | < .3 | 13 | 4 | 215 | 3.48 | 17 | < 8 | < 2 | 4 | 3 | < .5 | < 3 | < 3 | 39 | 0.03 | 0.068 | 16 | 28 |
| MP027040 | < 1 | 14 | 16 | 68 | < .3 | 17 | 6 | 314 | 2.39 | 16 | < 8 | < 2 | 4 | 7 | < .5 | < 3 | < 3 | 28 | 0.08 | 0.029 | 17 | 23 |
| MP027039 | 2 | 12 | 62 | 291 | < .3 | 22 | 24 | 4958 | 2.98 | 53 | < 8 | < 2 | 2 | 13 | 1.3 | < 3 | < 3 | 35 | 0.28 | 0.077 | 32 | 26 |
| MP027038 | 1 | 9 | 34 | 202 | < .3 | 17 | 10 | 1193 | 2.2 | 26 | < 8 | < 2 | 2 | 15 | < .5 | < 3 | 3 | 30 | 0.28 | 0.039 | 17 | 22 |
| **Line 3** | | | | | | | | | | | | | | | | | | | | | | |
| MP027006 | 1 | 4 | 10 | 24 | 0.3 | 5 | 2 | 86 | 2.39 | 6 | < 8 | < 2 | 5 | 2 | < .5 | 4 | < 3 | 36 | 0.02 | 0.038 | 12 | 23 |
| MP027005 | 1 | 6 | 14 | 48 | < .3 | 11 | 3 | 130 | 2.81 | 10 | < 8 | < 2 | 3 | 3 | < .5 | 3 | < 3 | 33 | 0.03 | 0.032 | 14 | 18 |
| MP027004 | 1 | 6 | 11 | 86 | 0.3 | 17 | 3 | 116 | 3.04 | 6 | < 8 | < 2 | 6 | 4 | < .5 | 3 | < 3 | 40 | 0.04 | 0.052 | 11 | 25 |
| MP027003 | 1 | 6 | 14 | 98 | < .3 | 14 | 2 | 84 | 3.19 | 3 | < 8 | < 2 | 7 | 5 | < .5 | 4 | < 3 | 34 | 0.06 | 0.064 | 11 | 24 |
| MP027002 | 1 | 31 | 15 | 121 | 0.6 | 52 | 9 | 123 | 4.49 | 95 | < 8 | < 2 | 6 | 3 | < .5 | 4 | < 3 | 43 | 0.02 | 0.058 | 31 | 50 |
| MP027001 | < 1 | 13 | 10 | 88 | 0.5 | 19 | 5 | 178 | 4.41 | 34 | < 8 | < 2 | 5 | 4 | < .5 | 3 | < 3 | 48 | 0.03 | 0.053 | 25 | 35 |
| MP027000 | 1 | 6 | 13 | 69 | 0.3 | 7 | 2 | 69 | 2.81 | 16 | < 8 | < 2 | 6 | 3 | < .5 | 4 | < 3 | 45 | 0.04 | 0.054 | 15 | 21 |
| MP027007 | 1 | 13 | 18 | 188 | 0.4 | 23 | 6 | 178 | 4.43 | 132 | < 8 | < 2 | 9 | 3 | 0.5 | 4 | < 3 | 50 | 0.03 | 0.111 | 12 | 33 |
| MP027008 | 1 | 11 | 12 | 107 | 0.6 | 15 | 4 | 203 | 3.19 | 19 | < 8 | < 2 | 6 | 3 | < .5 | 3 | < 3 | 40 | 0.03 | 0.203 | 16 | 26 |
| MP027009 | < 1 | 15 | 13 | 96 | 0.7 | 18 | 6 | 304 | 2.92 | 19 | < 8 | < 2 | 7 | 3 | < .5 | < 3 | < 3 | 37 | 0.04 | 0.104 | 19 | 25 |
| MP027010 | < 1 | 8 | 12 | 120 | 0.5 | 19 | 5 | 348 | 2.65 | 8 | < 8 | < 2 | 7 | 4 | < .5 | < 3 | < 3 | 35 | 0.04 | 0.098 | 16 | 22 |
| MP027011 | < 1 | 20 | 15 | 126 | 0.4 | 30 | 9 | 574 | 3.16 | 28 | < 8 | < 2 | 5 | 8 | < .5 | 3 | < 3 | 33 | 0.07 | 0.088 | 16 | 38 |
| MP027012 | < 1 | 10 | 23 | 57 | < .3 | 16 | 6 | 167 | 2.57 | 22 | < 8 | < 2 | 5 | 3 | < .5 | < 3 | < 3 | 48 | 0.05 | 0.066 | 14 | 33 |
| **Line 4** | | | | | | | | | | | | | | | | | | | | | | |
| MP027019 | 1 | 12 | 7 | 91 | < .3 | 29 | 6 | 173 | 3.7 | 19 | < 8 | < 2 | 3 | 8 | < .5 | < 3 | < 3 | 51 | 0.12 | 0.033 | 18 | 37 |
| MP027018 | < 1 | 7 | 11 | 41 | < .3 | 11 | 4 | 201 | 2.2 | 9 | < 8 | < 2 | 3 | 8 | < .5 | < 3 | < 3 | 32 | 0.13 | 0.027 | 16 | 20 |
| MP027017 | 1 | 7 | 15 | 83 | 0.5 | 12 | 3 | 144 | 3.55 | 6 | < 8 | < 2 | 5 | 4 | < .5 | < 3 | < 3 | 39 | 0.05 | 0.143 | 12 | 28 |
| MP027016 | < 1 | 4 | 13 | 70 | < .3 | 13 | 3 | 110 | 2.37 | 6 | < 8 | < 2 | 6 | 3 | < .5 | < 3 | < 3 | 32 | 0.02 | 0.103 | 11 | 19 |
| MP027015 | < 1 | 18 | 13 | 133 | 0.6 | 43 | 8 | 295 | 5.04 | 342 | < 8 | < 2 | 4 | 3 | < .5 | 3 | < 3 | 39 | 0.01 | 0.152 | 26 | 56 |
| MP027014 | 1 | 11 | 17 | 92 | 0.3 | 21 | 5 | 292 | 3.1 | 9 | < 8 | < 2 | 8 | 4 | < .5 | < 3 | < 3 | 37 | 0.05 | 0.098 | 16 | 22 |
| MP027013 | < 1 | 5 | 11 | 34 | < .3 | 10 | 3 | 134 | 1.34 | 6 | < 8 | < 2 | 4 | 4 | < .5 | < 3 | < 3 | 25 | 0.05 | 0.031 | 17 | 12 |
| MP027020 | < 1 | 9 | 16 | 62 | 0.5 | 11 | 3 | 188 | 2.4 | 13 | < 8 | < 2 | 8 | 4 | < .5 | < 3 | < 3 | 33 | 0.03 | 0.096 | 15 | 16 |
| MP027021 | < 1 | 7 | 11 | 39 | < .3 | 8 | 3 | 147 | 2.45 | 50 | < 8 | < 2 | 5 | 2 | < .5 | < 3 | < 3 | 37 | 0.02 | 0.042 | 18 | 17 |
| MP027022 | 1 | 20 | 18 | 72 | 0.5 | 29 | 5 | 247 | 4.83 | 48 | < 8 | < 2 | 5 | 3 | < .5 | < 3 | < 3 | 54 | 0.01 | 0.144 | 19 | 38 |
| MP027023 | < 1 | 15 | 8 | 125 | 0.3 | 31 | 8 | 473 | 3.13 | 14 | < 8 | < 2 | 6 | 3 | < .5 | < 3 | < 3 | 32 | 0.02 | 0.068 | 19 | 31 |
| MP027024 | < 1 | 14 | 9 | 86 | 0.4 | 39 | 8 | 319 | 3.11 | 19 | < 8 | < 2 | 6 | 7 | < .5 | < 3 | < 3 | 31 | 0.08 | 0.065 | 18 | 34 |
| MP027025 | < 1 | 1 | 12 | 6 | < .3 | 2 | 1 | 22 | 0.22 | < 2 | < 8 | < 2 | < 2 | 3 | < .5 | < 3 | < 3 | 9 | 0.02 | 0.009 | 18 | 4 |
| **Line 5** | | | | | | | | | | | | | | | | | | | | | | |
| MP027027 | < 1 | 5 | 14 | 71 | < .3 | 9 | 5 | 169 | 2.01 | 5 | < 8 | < 2 | 4 | 6 | < .5 | < 3 | < 3 | 32 | 0.07 | 0.029 | 15 | 14 |
| MP027026 | < 1 | 5 | 21 | 48 | < .3 | 10 | 17 | 1926 | 1.19 | 5 | < 8 | < 2 | < 2 | 21 | < .5 | < 3 | < 3 | 29 | 0.42 | 0.047 | 18 | 16 |
| MP027028 | < 1 | 11 | 16 | 55 | < .3 | 12 | 3 | 167 | 1.18 | 4 | < 8 | < 2 | < 2 | 6 | < .5 | < 3 | < 3 | 20 | 0.09 | 0.024 | 19 | 18 |
| MP027029 | < 1 | 3 | 13 | 39 | < .3 | 9 | 4 | 151 | 1.12 | 3 | < 8 | < 2 | < 2 | 4 | < .5 | < 3 | < 3 | 19 | 0.05 | 0.021 | 21 | 18 |
| MP027030 | < 1 | 16 | 21 | 74 | 0.3 | 41 | 16 | 658 | 1.92 | 50 | < 8 | < 2 | 4 | 24 | 0.5 | < 3 | < 3 | 27 | 0.41 | 0.099 | 34 | 22 |
| MP027031 | < 1 | 13 | 16 | 59 | < .3 | 25 | 13 | 1183 | 2.45 | 37 | < 8 | < 2 | 8 | 19 | < .5 | < 3 | < 3 | 35 | 0.32 | 0.075 | 38 | 20 |
| MP027032 | < 1 | 10 | 24 | 56 | 0.3 | 19 | 7 | 456 | 1.27 | 10 | < 8 | < 2 | < 2 | 31 | 0.6 | 3 | < 3 | 20 | 0.59 | 0.112 | 24 | 17 |
| MP027033 | < 1 | 13 | 24 | 79 | 0.3 | 28 | 18 | 2016 | 2.57 | 44 | < 8 | < 2 | < 2 | 20 | 0.7 | < 3 | < 3 | 37 | 0.35 | 0.117 | 26 | 26 |
| MP027034 | < 1 | 9 | 17 | 59 | < .3 | 25 | 8 | 518 | 1.73 | 11 | < 8 | < 2 | < 2 | 20 | < .5 | < 3 | < 3 | 27 | 0.33 | 0.103 | 24 | 26 |

## Appendix 7a. Conventional geochemical analysis of B-horizon soil samples, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-ES)

| SAMPLEID | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P | La | Cr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 1 | 1 | 3 | 1 | 0.3 | 1 | 1 | 2 | 0.01 | 2 | 8 | 2 | 2 | 1 | 0.5 | 3 | 3 | 1 | 0.01 | 0.001 | 1 | 1 |
| units | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | pct | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | pct | pct | ppm | ppm |
| MP027035 | < 1 | 7 | 13 | 50 | < .3 | 17 | 7 | 724 | 1.82 | 12 | < 8 | < 2 | < 2 | 16 | < .5 | < 3 | < 3 | 27 | 0.27 | 0.073 | 20 | 25 |
| MP027036 | < 1 | 10 | 19 | 62 | 0.3 | 15 | 7 | 573 | 1.64 | 16 | < 8 | < 2 | < 2 | 42 | 0.5 | < 3 | < 3 | 25 | 0.68 | 0.056 | 16 | 20 |
| MP027037 | < 1 | 15 | 21 | 74 | 0.3 | 31 | 8 | 504 | 1.67 | 19 | < 8 | < 2 | < 2 | 45 | 0.6 | 3 | < 3 | 25 | 0.77 | 0.113 | 25 | 24 |
| **Line 6** | | | | | | | | | | | | | | | | | | | | | | |
| MP027101 | < 1 | 12 | 19 | 88 | < .3 | 12 | 7 | 281 | 3.38 | 25 | < 8 | < 2 | 5 | 4 | < .5 | < 3 | < 3 | 41 | 0.05 | 0.129 | 15 | 25 |
| MP027100 | 1 | 16 | 28 | 108 | 1.3 | 11 | 7 | 586 | 6.9 | 24 | < 8 | < 2 | 13 | 4 | 0.5 | < 3 | < 3 | 72 | 0.05 | 0.404 | 13 | 44 |
| MP027099 | < 1 | 5 | 16 | 42 | 0.3 | 4 | 2 | 179 | 2.43 | 15 | < 8 | < 2 | 4 | 3 | < .5 | < 3 | < 3 | 32 | 0.02 | 0.053 | 15 | 15 |
| MP027098 | < 1 | 7 | 13 | 41 | 0.3 | 7 | 2 | 134 | 2.31 | 14 | < 8 | < 2 | 4 | 2 | < .5 | < 3 | < 3 | 29 | 0.01 | 0.046 | 17 | 23 |
| MP027097 | < 1 | 15 | 17 | 88 | 0.3 | 23 | 7 | 274 | 3.54 | 22 | < 8 | < 2 | 6 | 3 | < .5 | 4 | < 3 | 37 | 0.03 | 0.092 | 16 | 34 |
| MP027096 | < 1 | 16 | 18 | 67 | 0.3 | 18 | 7 | 409 | 4.09 | 24 | < 8 | < 2 | 6 | 5 | < .5 | 3 | < 3 | 41 | 0.04 | 0.061 | 19 | 32 |
| MP027095 | < 1 | 9 | 13 | 90 | 0.3 | 12 | 4 | 264 | 3.35 | 13 | < 8 | < 2 | 5 | 3 | < .5 | 3 | 3 | 37 | 0.03 | 0.09 | 17 | 31 |
| MP027094 | < 1 | 12 | 20 | 107 | 0.3 | 13 | 8 | 347 | 4.28 | 21 | < 8 | < 2 | 6 | 5 | < .5 | 3 | < 3 | 43 | 0.06 | 0.129 | 16 | 31 |
| MP027093 | < 1 | 9 | 22 | 72 | 0.5 | 8 | 5 | 616 | 5.42 | 22 | < 8 | < 2 | 7 | 4 | < .5 | 3 | < 3 | 61 | 0.04 | 0.187 | 11 | 33 |
| MP027092 | < 1 | 1 | 11 | 13 | < .3 | 2 | 1 | 66 | 0.31 | 6 | < 8 | < 2 | < 2 | 4 | < .5 | < 3 | < 3 | 16 | 0.05 | 0.017 | 18 | 5 |
| MP027091 | < 1 | 7 | 23 | 31 | < .3 | 8 | 8 | 311 | 0.93 | 5 | < 8 | < 2 | < 2 | 10 | < .5 | < 3 | < 3 | 13 | 0.17 | 0.053 | 18 | 10 |
| MP027090 | < 1 | 3 | 8 | 20 | < .3 | 1 | 1 | 158 | 0.2 | < 2 | < 8 | < 2 | 2 | 10 | < .5 | < 3 | < 3 | 11 | 0.22 | 0.012 | 13 | 3 |
| MP027089 | < 1 | 3 | 18 | 22 | < .3 | 5 | 2 | 72 | 0.52 | < 2 | < 8 | < 2 | < 2 | 7 | < .5 | < 3 | 4 | 12 | 0.08 | 0.038 | 18 | 9 |
| **Line 7** | | | | | | | | | | | | | | | | | | | | | | |
| MP027075 | < 1 | 9 | 18 | 58 | < .3 | 8 | 3 | 360 | 2.61 | 12 | < 8 | < 2 | 5 | 2 | < .5 | < 3 | < 3 | 35 | 0.02 | 0.067 | 15 | 20 |
| MP027074 | < 1 | 27 | 13 | 31 | 0.6 | 13 | 2 | 142 | 3.05 | 14 | < 8 | < 2 | 9 | 2 | < .5 | < 3 | < 3 | 28 | 0.01 | 0.069 | 19 | 40 |
| MP027073 | < 1 | 9 | 15 | 44 | < .3 | 10 | 3 | 481 | 2.41 | 14 | < 8 | < 2 | 5 | 4 | < .5 | < 3 | < 3 | 32 | 0.03 | 0.056 | 16 | 25 |
| MP027072 | 1 | 7 | 8 | 45 | 0.4 | 10 | 6 | 295 | 2.01 | 9 | < 8 | < 2 | 4 | 3 | < .5 | < 3 | < 3 | 29 | 0.02 | 0.045 | 18 | 21 |
| MP027071 | < 1 | 15 | 16 | 88 | 0.6 | 27 | 8 | 418 | 3.17 | 19 | < 8 | < 2 | 6 | 4 | < .5 | < 3 | < 3 | 32 | 0.03 | 0.099 | 17 | 39 |
| MP027070 | < 1 | 5 | 12 | 38 | < .3 | 8 | 3 | 225 | 1.98 | 8 | < 8 | < 2 | 3 | 3 | < .5 | < 3 | < 3 | 29 | 0.03 | 0.047 | 17 | 18 |
| MP027069 | 4 | 9 | 18 | 50 | 0.3 | 19 | 8 | 199 | 3.51 | 18 | < 8 | < 2 | 4 | 5 | < .5 | < 3 | < 3 | 41 | 0.04 | 0.045 | 15 | 30 |
| MP027068 | < 1 | 8 | 12 | 59 | < .3 | 22 | 6 | 323 | 2.72 | 10 | < 8 | < 2 | 4 | 4 | < .5 | < 3 | < 3 | 33 | 0.02 | 0.016 | 21 | 34 |
| MP027067 | < 1 | 2 | 11 | 21 | < .3 | 4 | 1 | 96 | 0.54 | < 2 | < 8 | < 2 | 2 | 5 | < .5 | < 3 | < 3 | 11 | 0.08 | 0.015 | 18 | 7 |
| MP027066 | 1 | 6 | 23 | 43 | 0.3 | 9 | 4 | 137 | 4.29 | 23 | < 8 | < 2 | 4 | 4 | < .5 | < 3 | < 3 | 54 | 0.07 | 0.055 | 13 | 27 |
| MP027065 | < 1 | 4 | 21 | 15 | < .3 | 4 | 2 | 136 | 0.42 | 2 | < 8 | < 2 | < 2 | 9 | < .5 | < 3 | < 3 | 10 | 0.22 | 0.036 | 16 | 6 |
| MP027064 | < 1 | 2 | 15 | 15 | < .3 | 4 | 1 | 86 | 1.01 | 3 | < 8 | < 2 | 3 | 3 | < .5 | < 3 | < 3 | 20 | 0.04 | 0.012 | 17 | 9 |
| MP027063 | < 1 | 3 | 18 | 18 | < .3 | 3 | 1 | 54 | 1.71 | 9 | < 8 | < 2 | 4 | 2 | < .5 | < 3 | < 3 | 25 | 0.02 | 0.019 | 13 | 13 |
| **Line 8** | | | | | | | | | | | | | | | | | | | | | | |
| MP027076 | < 1 | 6 | 15 | 28 | < .3 | 4 | 1 | 119 | 4.86 | 20 | < 8 | < 2 | 4 | 3 | < .5 | < 3 | < 3 | 80 | 0.04 | 0.071 | 12 | 22 |
| MP027077 | < 1 | 5 | 13 | 27 | < .3 | 6 | 2 | 168 | 2.54 | 14 | < 8 | < 2 | 5 | 3 | < .5 | < 3 | < 3 | 49 | 0.03 | 0.098 | 17 | 17 |
| MP027078 | 1 | 7 | 12 | 67 | 0.3 | 13 | 4 | 196 | 3.74 | 17 | < 8 | < 2 | 6 | 3 | < .5 | < 3 | < 3 | 38 | 0.03 | 0.072 | 16 | 31 |
| MP027079 | < 1 | 18 | 17 | 78 | 0.6 | 26 | 8 | 311 | 3.74 | 19 | < 8 | < 2 | 8 | 4 | < .5 | < 3 | < 3 | 37 | 0.04 | 0.079 | 18 | 38 |
| MP027080 | < 1 | 9 | 12 | 83 | 0.8 | 19 | 5 | 244 | 3.06 | 13 | < 8 | < 2 | 5 | 6 | < .5 | < 3 | < 3 | 41 | 0.08 | 0.077 | 15 | 26 |
| MP027081 | < 1 | 21 | 15 | 75 | < .3 | 32 | 9 | 349 | 3.17 | 21 | < 8 | < 2 | 8 | 4 | < .5 | < 3 | < 3 | 38 | 0.04 | 0.058 | 23 | 33 |
| MP027082 | < 1 | 12 | 13 | 62 | < .3 | 17 | 4 | 197 | 2.94 | 18 | < 8 | < 2 | 5 | 3 | < .5 | < 3 | < 3 | 37 | 0.04 | 0.067 | 18 | 27 |
| MP027083 | < 1 | 15 | 15 | 64 | 0.4 | 27 | 8 | 282 | 3.65 | 19 | < 8 | < 2 | 8 | 4 | < .5 | < 3 | < 3 | 37 | 0.04 | 0.065 | 18 | 39 |
| MP027084 | 2 | 15 | 28 | 96 | 0.4 | 16 | 5 | 276 | 6.59 | 29 | < 8 | < 2 | 8 | 6 | < .5 | < 3 | < 3 | 71 | 0.08 | 0.121 | 16 | 39 |
| MP027085 | 1 | 13 | 23 | 75 | 0.3 | 12 | 4 | 258 | 7.37 | 49 | < 8 | < 2 | 6 | 6 | < .5 | < 3 | < 3 | 85 | 0.11 | 0.172 | 13 | 41 |
| MP027086 | < 1 | 11 | 18 | 74 | < .3 | 13 | 5 | 358 | 4.09 | 28 | < 8 | < 2 | 6 | 4 | < .5 | < 3 | < 3 | 54 | 0.08 | 0.098 | 17 | 30 |
| MP027087 | < 1 | 9 | 16 | 94 | 0.5 | 16 | 5 | 373 | 3.72 | 22 | < 8 | < 2 | 6 | 4 | < .5 | < 3 | < 3 | 48 | 0.05 | 0.082 | 16 | 40 |
| MP027088 | < 1 | 5 | 19 | 43 | 0.5 | 5 | 2 | 118 | 3.98 | 15 | < 8 | < 2 | 6 | 2 | < .5 | < 3 | < 3 | 55 | 0.02 | 0.093 | 13 | 28 |

## Appendix 7a. Conventional geochemical analysis of B-horizon soil samples, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-ES)

| SAMPLEID | Mg | Ba | Ti | B | Al | Na | K | W |
|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.01 | 1 | 0.01 | 3 | 0.01 | 0.01 | 0.01 | 2 |
| units | pct | ppm | pct | ppm | pct | pct | pct | ppm |
| **Line 1** | | | | | | | | |
| MP027056 | 0.15 | 31 | 0.04 | < 3 | 2.69 | < .01 | 0.05 | < 2 |
| MP027055 | 0.22 | 27 | 0.03 | < 3 | 1.65 | < .01 | 0.05 | < 2 |
| MP027054 | 0.17 | 22 | 0.04 | < 3 | 7.76 | < .01 | 0.05 | 4 |
| MP027053 | 0.4 | 57 | 0.06 | < 3 | 2.8 | < .01 | 0.12 | < 2 |
| MP027052 | 0.29 | 42 | 0.05 | < 3 | 3.29 | < .01 | 0.07 | 2 |
| MP027051 | 0.14 | 30 | 0.03 | < 3 | 2.24 | 0.01 | 0.06 | < 2 |
| MP027050 | 0.38 | 34 | 0.02 | < 3 | 2.45 | < .01 | 0.04 | < 2 |
| MP027057 | 0.49 | 34 | 0.01 | < 3 | 1.85 | < .01 | 0.05 | < 2 |
| MP027058 | 0.35 | 31 | 0.02 | < 3 | 2.02 | < .01 | 0.04 | < 2 |
| MP027059 | 0.17 | 75 | 0.04 | < 3 | 0.75 | < .01 | 0.03 | < 2 |
| MP027060 | 0.29 | 31 | 0.09 | < 3 | 1.68 | 0.03 | 0.15 | 3 |
| MP027061 | 0.35 | 41 | 0.02 | < 3 | 2.72 | < .01 | 0.07 | < 2 |
| MP027062 | 0.31 | 47 | 0.02 | < 3 | 1.84 | < .01 | 0.06 | 4 |
| **Line 2** | | | | | | | | |
| MP027049 | 0.32 | 29 | 0.01 | < 3 | 2.29 | < .01 | 0.05 | < 2 |
| MP027048 | 0.42 | 33 | 0.03 | < 3 | 3.24 | < .01 | 0.05 | 2 |
| MP027047 | 0.22 | 33 | 0.02 | < 3 | 2.61 | < .01 | 0.05 | 4 |
| MP027046 | 0.47 | 34 | 0.02 | < 3 | 1.86 | < .01 | 0.08 | < 2 |
| MP027045 | 0.42 | 24 | 0.02 | < 3 | 1.41 | < .01 | 0.06 | < 2 |
| MP027044 | 0.15 | 13 | 0.01 | < 3 | 0.58 | < .01 | 0.04 | < 2 |
| MP027043 | 0.27 | 41 | 0.03 | < 3 | 2.14 | < .01 | 0.06 | < 2 |
| MP027042 | 0.35 | 31 | 0.05 | < 3 | 1.58 | < .01 | 0.07 | < 2 |
| MP027041 | 0.32 | 49 | 0.02 | < 3 | 2.22 | < .01 | 0.06 | < 2 |
| MP027040 | 0.48 | 63 | 0.04 | < 3 | 1.55 | < .01 | 0.08 | < 2 |
| MP027039 | 0.61 | 132 | 0.04 | < 3 | 1.86 | < .01 | 0.06 | 3 |
| MP027038 | 0.45 | 83 | 0.04 | < 3 | 1.47 | < .01 | 0.06 | < 2 |
| **Line 3** | | | | | | | | |
| MP027006 | 0.22 | 34 | 0.02 | < 3 | 2.46 | < .01 | 0.04 | 2 |
| MP027005 | 0.25 | 32 | 0.05 | < 3 | 1.52 | 0.01 | 0.06 | < 2 |
| MP027004 | 0.24 | 44 | 0.04 | < 3 | 3.58 | < .01 | 0.04 | 2 |
| MP027003 | 0.13 | 35 | 0.03 | < 3 | 3.78 | 0.01 | 0.03 | 3 |
| MP027002 | 0.6 | 46 | < .01 | < 3 | 2.71 | < .01 | 0.04 | 4 |
| MP027001 | 0.37 | 37 | 0.01 | < 3 | 1.92 | < .01 | 0.05 | < 2 |
| MP027000 | 0.14 | 36 | 0.01 | < 3 | 2.75 | < .01 | 0.03 | 5 |
| MP027007 | 0.23 | 51 | 0.02 | < 3 | 4.8 | < .01 | 0.05 | 4 |
| MP027008 | 0.24 | 50 | 0.02 | < 3 | 2.76 | < .01 | 0.06 | 2 |
| MP027009 | 0.34 | 53 | 0.03 | < 3 | 2.33 | < .01 | 0.07 | 2 |
| MP027010 | 0.29 | 54 | 0.04 | < 3 | 2.73 | < .01 | 0.07 | 4 |
| MP027011 | 0.58 | 88 | 0.02 | < 3 | 2.69 | < .01 | 0.07 | < 2 |
| MP027012 | 0.4 | 37 | 0.05 | < 3 | 3.13 | < .01 | 0.07 | < 2 |
| **Line 4** | | | | | | | | |
| MP027019 | 0.49 | 35 | 0.02 | < 3 | 1.68 | < .01 | 0.05 | < 2 |
| MP027018 | 0.33 | 49 | 0.05 | < 3 | 1.19 | < .01 | 0.08 | < 2 |
| MP027017 | 0.21 | 39 | 0.03 | < 3 | 2.76 | < .01 | 0.06 | < 2 |
| MP027016 | 0.15 | 29 | 0.04 | < 3 | 3.31 | < .01 | 0.04 | 2 |
| MP027015 | 0.65 | 50 | < .01 | < 3 | 2.58 | < .01 | 0.06 | 4 |
| MP027014 | 0.3 | 47 | 0.05 | < 3 | 3.52 | < .01 | 0.08 | 2 |
| MP027013 | 0.24 | 31 | 0.03 | < 3 | 1.65 | < .01 | 0.06 | < 2 |
| MP027020 | 0.19 | 29 | 0.06 | < 3 | 3.23 | < .01 | 0.07 | 2 |
| MP027021 | 0.25 | 36 | 0.04 | < 3 | 1.65 | < .01 | 0.05 | < 2 |
| MP027022 | 0.44 | 34 | 0.03 | < 3 | 2.54 | < .01 | 0.07 | < 2 |
| MP027023 | 0.41 | 59 | 0.01 | < 3 | 2.27 | < .01 | 0.05 | < 2 |
| MP027024 | 0.61 | 75 | 0.02 | < 3 | 2.56 | < .01 | 0.08 | < 2 |
| MP027025 | 0.05 | 14 | 0.01 | < 3 | 0.57 | < .01 | 0.02 | < 2 |
| **Line 5** | | | | | | | | |
| MP027027 | 0.25 | 41 | 0.07 | < 3 | 1.23 | < .01 | 0.05 | < 2 |
| MP027026 | 0.25 | 84 | 0.02 | < 3 | 1.17 | < .01 | 0.08 | < 2 |
| MP027028 | 0.4 | 29 | 0.02 | < 3 | 1.1 | < .01 | 0.04 | < 2 |
| MP027029 | 0.41 | 22 | 0.01 | < 3 | 1.07 | < .01 | 0.05 | < 2 |
| MP027030 | 0.54 | 72 | 0.05 | < 3 | 1.58 | < .01 | 0.12 | < 2 |
| MP027031 | 0.5 | 79 | 0.07 | < 3 | 1.89 | < .01 | 0.13 | 4 |
| MP027032 | 0.3 | 79 | 0.02 | < 3 | 1.75 | < .01 | 0.07 | 2 |
| MP027033 | 0.44 | 139 | 0.03 | < 3 | 2.17 | 0.01 | 0.1 | 2 |
| MP027034 | 0.44 | 84 | 0.02 | < 3 | 2 | < .01 | 0.09 | < 2 |

Appendix 7a. Conventional geochemical analysis of B-horizon soil samples, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-ES)

| SAMPLEID | Mg | Ba | Ti | B | Al | Na | K | W |
|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.01 | 1 | 0.01 | 3 | 0.01 | 0.01 | 0.01 | 2 |
| units | pct | ppm | pct | ppm | pct | pct | pct | ppm |
| MP027035 | 0.49 | 70 | 0.02 | < 3 | 1.53 | < .01 | 0.07 | < 2 |
| MP027036 | 0.44 | 65 | 0.01 | < 3 | 1.26 | 0.01 | 0.07 | < 2 |
| MP027037 | 0.42 | 110 | 0.02 | < 3 | 2.06 | < .01 | 0.13 | < 2 |
| **Line 6** | | | | | | | | |
| MP027101 | 0.3 | 57 | 0.02 | < 3 | 2.14 | 0.01 | 0.05 | < 2 |
| MP027100 | 0.22 | 59 | 0.08 | < 3 | 5.7 | 0.01 | 0.06 | 3 |
| MP027099 | 0.14 | 28 | 0.03 | < 3 | 1.56 | < .01 | 0.03 | < 2 |
| MP027098 | 0.3 | 33 | 0.01 | < 3 | 1.71 | < .01 | 0.05 | < 2 |
| MP027097 | 0.51 | 48 | 0.04 | < 3 | 2.63 | 0.01 | 0.1 | 2 |
| MP027096 | 0.5 | 57 | 0.05 | < 3 | 2.01 | < .01 | 0.09 | 5 |
| MP027095 | 0.38 | 48 | 0.02 | < 3 | 2.51 | < .01 | 0.07 | 2 |
| MP027094 | 0.25 | 51 | 0.04 | < 3 | 3.19 | < .01 | 0.05 | 2 |
| MP027093 | 0.14 | 39 | 0.06 | < 3 | 3.82 | < .01 | 0.04 | 3 |
| MP027092 | 0.08 | 16 | 0.01 | < 3 | 0.61 | 0.01 | 0.04 | < 2 |
| MP027091 | 0.22 | 47 | 0.01 | < 3 | 0.77 | 0.01 | 0.04 | < 2 |
| MP027090 | 0.06 | 32 | 0.01 | < 3 | 0.55 | 0.01 | 0.02 | < 2 |
| MP027089 | 0.18 | 72 | 0.01 | < 3 | 0.9 | < .01 | 0.08 | < 2 |
| **Line 7** | | | | | | | | |
| MP027075 | 0.2 | 29 | 0.02 | < 3 | 1.96 | < .01 | 0.05 | < 2 |
| MP027074 | 0.32 | 32 | 0.02 | < 3 | 4.24 | < .01 | 0.05 | 2 |
| MP027073 | 0.31 | 71 | 0.02 | < 3 | 1.98 | < .01 | 0.06 | < 2 |
| MP027072 | 0.28 | 41 | 0.01 | < 3 | 1.82 | 0.01 | 0.05 | < 2 |
| MP027071 | 0.55 | 57 | 0.02 | < 3 | 3.2 | 0.01 | 0.07 | < 2 |
| MP027070 | 0.24 | 38 | 0.01 | < 3 | 1.48 | < .01 | 0.05 | < 2 |
| MP027069 | 0.44 | 60 | 0.03 | < 3 | 2.4 | < .01 | 0.09 | 2 |
| MP027068 | 0.87 | 40 | 0.04 | < 3 | 1.76 | < .01 | 0.09 | < 2 |
| MP027067 | 0.15 | 31 | 0.01 | < 3 | 0.5 | < .01 | 0.04 | < 2 |
| MP027066 | 0.26 | 41 | 0.04 | < 3 | 2.13 | < .01 | 0.04 | 2 |
| MP027065 | 0.12 | 47 | 0.01 | < 3 | 0.57 | < .01 | 0.04 | < 2 |
| MP027064 | 0.17 | 23 | 0.02 | < 3 | 0.82 | < .01 | 0.04 | < 2 |
| MP027063 | 0.11 | 16 | 0.02 | < 3 | 1.47 | < .01 | 0.03 | < 2 |
| **Line 8** | | | | | | | | |
| MP027076 | 0.14 | 30 | 0.12 | < 3 | 1.19 | < .01 | 0.04 | < 2 |
| MP027077 | 0.15 | 40 | 0.02 | < 3 | 1.38 | < .01 | 0.06 | < 2 |
| MP027078 | 0.37 | 51 | 0.03 | < 3 | 2.56 | < .01 | 0.05 | 4 |
| MP027079 | 0.63 | 54 | 0.02 | < 3 | 2.96 | < .01 | 0.09 | < 2 |
| MP027080 | 0.37 | 64 | 0.02 | < 3 | 2.89 | 0.01 | 0.06 | < 2 |
| MP027081 | 0.7 | 75 | 0.06 | < 3 | 2.48 | 0.01 | 0.11 | < 2 |
| MP027082 | 0.4 | 43 | 0.03 | < 3 | 1.93 | 0.01 | 0.07 | < 2 |
| MP027083 | 0.61 | 55 | 0.03 | < 3 | 2.81 | 0.01 | 0.08 | < 2 |
| MP027084 | 0.48 | 54 | 0.14 | < 3 | 2.91 | 0.01 | 0.09 | 2 |
| MP027085 | 0.39 | 40 | 0.1 | < 3 | 2.14 | 0.01 | 0.06 | < 2 |
| MP027086 | 0.42 | 54 | 0.08 | < 3 | 1.77 | 0.01 | 0.07 | < 2 |
| MP027087 | 0.43 | 58 | 0.02 | < 3 | 3.25 | < .01 | 0.06 | < 2 |
| MP027088 | 0.12 | 24 | 0.06 | < 3 | 3.38 | < .01 | 0.05 | < 2 |

# Appendix 7b. Conventional geochemical analysis of B-horizon soil samples, Mount Fronsac massive sulphide deposit, Bathurst Mining Camp, 21 O/8, New Brunswick - (ICP-ES)

| SAMPLEID | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P | La | Cr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 1 | 1 | 3 | 1 | 0.3 | 1 | 1 | 2 | 0.01 | 2 | 8 | 2 | 2 | 1 | 0.5 | 3 | 3 | 1 | 0.01 | 0.001 | 1 | 1 |
| Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | pct | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | pct | pct | ppm | ppm |
| **Line 1** | | | | | | | | | | | | | | | | | | | | | | |
| MP027102 | < 1 | 3 | 15 | 18 | < .3 | 3 | 1 | 62 | 1.34 | 6 | < 8 | < 2 | 4 | 4 | < .5 | < 3 | < 3 | 20 | 0.04 | 0.041 | 15 | 3 |
| MP027103 | 1 | 5 | 33 | 48 | 0.3 | 5 | 1 | 120 | 3.37 | 13 | < 8 | < 2 | 6 | 4 | < .5 | 4 | < 3 | 22 | 0.08 | 0.194 | 16 | 12 |
| MP027104 | < 1 | 6 | 49 | 43 | 0.8 | 4 | 1 | 107 | 3.71 | 23 | < 8 | < 2 | 5 | 3 | < .5 | < 3 | < 3 | 25 | 0.01 | 0.156 | 16 | 11 |
| MP027105 | 1 | 8 | 80 | 38 | 0.4 | 6 | 1 | 93 | 5.44 | 70 | < 8 | < 2 | 6 | 4 | < .5 | 4 | 4 | 28 | 0.06 | 0.058 | 15 | 13 |
| MP027106 | < 1 | 4 | 10 | 23 | < .3 | 1 | 1 | 28 | 0.31 | < 2 | < 8 | < 2 | < 2 | 10 | < .5 | < 3 | < 3 | 7 | 0.12 | 0.031 | 10 | 1 |
| MP027107 | < 1 | 9 | 35 | 63 | < .3 | 13 | 5 | 297 | 2.02 | 15 | < 8 | < 2 | 4 | 6 | < .5 | 3 | < 3 | 20 | 0.06 | 0.061 | 29 | 13 |
| MP027108 | < 1 | 4 | 11 | 9 | < .3 | 2 | 1 | 26 | 0.54 | 7 | < 8 | < 2 | 3 | 1 | < .5 | < 3 | < 3 | 18 | 0.01 | 0.018 | 15 | 2 |
| MP027109 | < 1 | 4 | 15 | 36 | 0.3 | 2 | < 1 | 144 | 0.08 | 2 | < 8 | < 2 | < 2 | 13 | < .5 | < 3 | < 3 | 1 | 0.21 | 0.04 | 3 | 1 |
| MP027110 | < 1 | 12 | 58 | 23 | < .3 | 3 | < 1 | 47 | 5.24 | 44 | < 8 | < 2 | 10 | 2 | 0.5 | < 3 | < 3 | 44 | 0.01 | 0.086 | 16 | 14 |
| MP027111 | < 1 | 6 | 13 | 9 | < .3 | 1 | 1 | 4 | 0.39 | 5 | < 8 | < 2 | < 2 | 4 | < .5 | < 3 | < 3 | 4 | 0.01 | 0.017 | 12 | 1 |
| MP027112 | < 1 | 2 | 13 | 15 | < .3 | 1 | < 1 | 10 | 0.15 | < 2 | < 8 | < 2 | < 2 | 4 | < .5 | < 3 | < 3 | 2 | 0.01 | 0.015 | 9 | < 1 |
| MP027113 | < 1 | 3 | 10 | 8 | < .3 | 2 | < 1 | 15 | 0.44 | 7 | < 8 | < 2 | 3 | 2 | < .5 | < 3 | < 3 | 14 | < .01 | 0.012 | 16 | 2 |
| MP027114 | < 1 | 14 | 27 | 46 | < .3 | 10 | 3 | 153 | 3.03 | 32 | < 8 | < 2 | 5 | 2 | < .5 | 4 | < 3 | 26 | 0.01 | 0.037 | 18 | 17 |
| MP027115 | < 1 | 7 | 22 | 26 | 0.3 | 2 | 2 | 105 | 4.88 | 16 | < 8 | < 2 | 6 | 8 | < .5 | < 3 | < 3 | 39 | 0.02 | 0.101 | 26 | 10 |
| MP027116 | < 1 | 5 | 19 | 27 | < .3 | 5 | 1 | 68 | 3.31 | 12 | < 8 | < 2 | 6 | 3 | < .5 | < 3 | < 3 | 25 | 0.02 | 0.052 | 17 | 10 |
| **Line 2** | | | | | | | | | | | | | | | | | | | | | | |
| MP027130 | 1 | 4 | 40 | 33 | < .3 | 2 | < 1 | 113 | 4.08 | 17 | < 8 | < 2 | 6 | 4 | < .5 | < 3 | < 3 | 21 | 0.01 | 0.039 | 13 | 2 |
| MP027129 | < 1 | 4 | 30 | 19 | < .3 | 1 | < 1 | 92 | 1.95 | 9 | < 8 | < 2 | 3 | 3 | < .5 | < 3 | < 3 | 28 | 0.02 | 0.054 | 11 | 2 |
| MP027128 | < 1 | 2 | 21 | 7 | < .3 | 1 | < 1 | 52 | 0.18 | 2 | < 8 | < 2 | < 2 | 2 | < .5 | < 3 | < 3 | 51 | 0.01 | 0.222 | 13 | 6 |
| MP027127 | < 1 | 8 | 134 | 43 | 0.3 | 1 | 1 | 211 | 1.39 | 7 | < 8 | < 2 | 3 | 4 | < .5 | < 3 | < 3 | 24 | 0.02 | 0.035 | 11 | 2 |
| MP027126 | < 1 | 7 | 80 | 43 | 0.5 | 1 | 1 | 237 | 3.21 | 7 | < 8 | < 2 | 2 | 4 | < .5 | < 3 | < 3 | 43 | 0.02 | 0.171 | 8 | 5 |
| MP027125 | 1 | 4 | 31 | 25 | 0.5 | 1 | < 1 | 119 | 2.55 | 10 | < 8 | < 2 | 3 | 5 | < .5 | < 3 | < 3 | 37 | 0.03 | 0.075 | 8 | 3 |
| MP027124 | < 1 | 2 | 9 | 15 | 0.3 | < 1 | < 1 | 117 | 0.37 | < 2 | < 8 | < 2 | < 2 | 3 | < .5 | < 3 | < 3 | 42 | 0.03 | 0.163 | 11 | 5 |
| MP027123 | < 1 | 8 | 80 | 52 | 0.4 | < 1 | 1 | 269 | 3.87 | 8 | < 8 | < 2 | 4 | 4 | < .5 | < 3 | < 3 | 7 | 0.03 | 0.021 | 5 | 1 |
| MP027122 | < 1 | 3 | 43 | 31 | < .3 | < 1 | < 1 | 135 | 2.52 | 6 | < 8 | < 2 | 2 | 4 | < .5 | < 3 | < 3 | 31 | 0.01 | 0.093 | 12 | 3 |
| MP027121 | < 1 | 6 | 33 | 54 | < .3 | 2 | 1 | 169 | 3.5 | 5 | < 8 | < 2 | 3 | 4 | < .5 | < 3 | < 3 | 50 | 0.02 | 0.132 | 8 | 3 |
| MP027120 | < 1 | 3 | 30 | 26 | < .3 | 1 | 1 | 151 | 1.06 | 4 | < 8 | < 2 | 3 | 6 | < .5 | < 3 | < 3 | 39 | 0.01 | 0.046 | 10 | 2 |
| MP027119 | 1 | 6 | 59 | 44 | < .3 | 1 | < 1 | 189 | 4.81 | 8 | < 8 | < 2 | 5 | 4 | < .5 | < 3 | < 3 | 3 | 0.01 | 0.014 | 6 | 1 |
| MP027118 | < 1 | 3 | 43 | 30 | < .3 | 1 | 1 | 146 | 1.43 | 5 | < 8 | < 2 | 3 | 3 | < .5 | < 3 | < 3 | 34 | 0.01 | 0.078 | 15 | 3 |
| MP027117 | < 1 | 2 | 17 | 13 | < .3 | 2 | < 1 | 62 | 1.05 | 4 | < 8 | < 2 | 2 | 2 | < .5 | < 3 | < 3 | 48 | 0.01 | 0.173 | 16 | 6 |
| **Line 3** | | | | | | | | | | | | | | | | | | | | | | |
| MP027141 | < 1 | 12 | 30 | 109 | < .3 | 8 | 5 | 470 | 3.72 | 15 | < 8 | < 2 | 7 | 2 | < .5 | < 3 | < 3 | 23 | 0.01 | 0.132 | 23 | 17 |
| MP027140 | < 1 | 11 | 48 | 115 | < .3 | 12 | 6 | 405 | 3.3 | 20 | < 8 | < 2 | 5 | 5 | < .5 | < 3 | < 3 | 25 | 0.02 | 0.082 | 24 | 18 |
| MP027139 | < 1 | 9 | 25 | 72 | < .3 | 7 | 4 | 451 | 4.53 | 16 | < 8 | < 2 | 6 | 2 | < .5 | 3 | < 3 | 33 | 0.02 | 0.126 | 19 | 18 |
| MP027138 | < 1 | 10 | 24 | 113 | < .3 | 11 | 6 | 357 | 2.72 | 11 | < 8 | < 2 | 4 | 3 | < .5 | < 3 | < 3 | 26 | 0.02 | 0.085 | 22 | 15 |
| MP027137 | < 1 | 6 | 19 | 49 | < .3 | 5 | 4 | 424 | 3.22 | 17 | < 8 | < 2 | 2 | 9 | < .5 | < 3 | < 3 | 25 | 0.09 | 0.101 | 26 | 12 |
| MP027136 | < 1 | 7 | 23 | 60 | < .3 | 6 | 3 | 214 | 4.76 | 9 | < 8 | < 2 | 8 | 2 | < .5 | < 3 | < 3 | 29 | < .01 | 0.15 | 14 | 21 |
| MP027135 | < 1 | 7 | 24 | 77 | < .3 | 7 | 5 | 502 | 3.89 | 7 | < 8 | < 2 | 6 | 2 | < .5 | < 3 | < 3 | 26 | 0.01 | 0.195 | 22 | 14 |
| MP027134 | < 1 | 5 | 27 | 35 | < .3 | 4 | 1 | 172 | 5.67 | 9 | < 8 | < 2 | 7 | 1 | < .5 | < 3 | < 3 | 30 | 0.01 | 0.122 | 15 | 18 |
| MP027133 | < 1 | 5 | 17 | 38 | < .3 | 3 | < 1 | 148 | 5.07 | 9 | < 8 | < 2 | 4 | 2 | < .5 | < 3 | < 3 | 31 | 0.01 | 0.117 | 16 | 10 |
| MP027132 | < 1 | 7 | 23 | 37 | < .3 | 5 | 2 | 275 | 5.61 | 9 | < 8 | < 2 | 3 | 2 | < .5 | < 3 | < 3 | 37 | 0.02 | 0.221 | 20 | 11 |
| MP027131 | < 1 | 4 | 17 | 20 | < .3 | 2 | < 1 | 151 | 6.02 | 6 | < 8 | < 2 | 3 | 2 | < .5 | < 3 | < 3 | 41 | 0.01 | 0.108 | 15 | 11 |

Appendix 7b. Conventional geochemical analysis of B-horizon soil samples, Mount Fronsac massive sulphide deposit, Bathurst Mining Camp, 21 O/8, New Brunswick - (ICP-ES)

| **SAMPLEID** | **Mg** | **Ba** | **Ti** | **B** | **Al** | **Na** | **K** | **W** |
|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.01 | 1 | 0.01 | 3 | 0.01 | 0.01 | 0.01 | 2 |
| Unit | pct | ppm | pct | ppm | pct | pct | pct | ppm |
| **Line 1** | | | | | | | | |
| MP027102 | 0.11 | 53 | 0.08 | < 3 | 0.63 | 0.01 | 0.11 | < 2 |
| MP027103 | 0.19 | 61 | 0.04 | < 3 | 2.72 | 0.01 | 0.07 | 5 |
| MP027104 | 0.17 | 37 | 0.05 | < 3 | 3.43 | < .01 | 0.06 | < 2 |
| MP027105 | 0.23 | 52 | 0.07 | < 3 | 1.61 | 0.01 | 0.09 | < 2 |
| MP027106 | 0.05 | 47 | 0.02 | < 3 | 0.39 | < .01 | 0.08 | < 2 |
| MP027107 | 0.4 | 38 | 0.05 | < 3 | 1.6 | 0.01 | 0.11 | < 2 |
| MP027108 | 0.04 | 16 | 0.06 | < 3 | 0.35 | 0.01 | 0.08 | < 2 |
| MP027109 | 0.03 | 117 | < .01 | < 3 | 0.11 | 0.01 | 0.05 | < 2 |
| MP027110 | 0.12 | 31 | 0.08 | < 3 | 2.81 | 0.01 | 0.06 | < 2 |
| MP027111 | 0.02 | 46 | 0.01 | < 3 | 0.28 | 0.01 | 0.07 | < 2 |
| MP027112 | 0.02 | 24 | 0.01 | < 3 | 0.14 | 0.01 | 0.05 | < 2 |
| MP027113 | 0.04 | 14 | 0.03 | < 3 | 0.49 | 0.01 | 0.08 | < 2 |
| MP027114 | 0.41 | 37 | 0.06 | < 3 | 1.39 | 0.01 | 0.11 | < 2 |
| MP027115 | 0.17 | 36 | 0.09 | < 3 | 3.63 | < .01 | 0.07 | < 2 |
| MP027116 | 0.19 | 27 | 0.06 | < 3 | 1.84 | < .01 | 0.1 | < 2 |
| **Line 2** | | | | | | | | |
| MP027130 | 0.1 | 17 | 0.11 | < 3 | 1.43 | < .01 | 0.12 | < 2 |
| MP027129 | 0.2 | 28 | 0.09 | < 3 | 0.72 | < .01 | 0.09 | < 2 |
| MP027128 | 0.27 | 33 | 0.02 | < 3 | 0.19 | < .01 | 0.05 | < 2 |
| MP027127 | 0.21 | 34 | 0.09 | < 3 | 1.01 | < .01 | 0.07 | < 2 |
| MP027126 | 0.24 | 41 | 0.09 | < 3 | 1.25 | < .01 | 0.07 | < 2 |
| MP027125 | 0.17 | 27 | 0.06 | < 3 | 0.87 | < .01 | 0.06 | < 2 |
| MP027124 | 0.31 | 26 | 0.03 | < 3 | 0.26 | 0.01 | 0.04 | < 2 |
| MP027123 | 0.05 | 22 | 0.09 | < 3 | 1.43 | < .01 | 0.09 | < 2 |
| MP027122 | 0.14 | 33 | 0.09 | < 3 | 1.01 | < .01 | 0.05 | < 2 |
| MP027121 | 0.24 | 29 | 0.1 | < 3 | 1.82 | < .01 | 0.09 | < 2 |
| MP027120 | 0.17 | 23 | 0.09 | < 3 | 1.04 | 0.01 | 0.12 | < 2 |
| MP027119 | 0.03 | 24 | 0.09 | < 3 | 1.94 | < .01 | 0.1 | < 2 |
| MP027118 | 0.11 | 25 | 0.08 | < 3 | 1.07 | < .01 | 0.09 | < 2 |
| MP027117 | 0.17 | 35 | 0.08 | < 3 | 0.61 | < .01 | 0.06 | < 2 |
| **Line 3** | | | | | | | | |
| MP027141 | 0.29 | 45 | 0.02 | < 3 | 4.33 | < .01 | 0.11 | < 2 |
| MP027140 | 0.45 | 51 | 0.03 | < 3 | 2.93 | < .01 | 0.15 | < 2 |
| MP027139 | 0.34 | 39 | 0.03 | < 3 | 2.98 | < .01 | 0.15 | < 2 |
| MP027138 | 0.41 | 48 | 0.03 | < 3 | 2.97 | < .01 | 0.14 | < 2 |
| MP027137 | 0.37 | 84 | 0.05 | < 3 | 1.58 | < .01 | 0.17 | < 2 |
| MP027136 | 0.23 | 29 | 0.03 | < 3 | 4.53 | < .01 | 0.06 | 2 |
| MP027135 | 0.33 | 39 | 0.03 | < 3 | 4.69 | < .01 | 0.12 | 2 |
| MP027134 | 0.21 | 25 | 0.03 | < 3 | 4.07 | < .01 | 0.06 | 2 |
| MP027133 | 0.15 | 34 | 0.04 | < 3 | 2.35 | < .01 | 0.09 | < 2 |
| MP027132 | 0.28 | 29 | 0.06 | < 3 | 2.43 | < .01 | 0.12 | < 2 |
| MP027131 | 0.13 | 29 | 0.04 | < 3 | 1.45 | < .01 | 0.07 | < 2 |

Appendix 7c. Conventional geochemical analysis of B-horizon soil samples, Camel Back massive sulphide deposit, Bathurst Mining Camp, 21 O/9, New Brunswick - (ICP-ES)

| SAMPLEID | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P | La | Cr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 1 | 1 | 3 | 1 | 0.3 | 1 | 1 | 2 | 0.01 | 2 | 8 | 2 | 2 | 1 | 0.5 | 3 | 3 | 1 | 0.01 | 0.001 | 1 | 1 |
| Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | pct | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | pct | pct | ppm | ppm |
| **Line 1** | | | | | | | | | | | | | | | | | | | | | | |
| MP027152 | < 1 | 11 | 29 | 50 | 0.4 | 9 | 3 | 251 | 4.39 | 17 | < 8 | < 2 | 6 | 6 | < .5 | 4 | < 3 | 65 | 0.06 | 0.158 | 28 | 24 |
| MP027151 | < 1 | 8 | 20 | 85 | 0.4 | 9 | 4 | 341 | 4.45 | 13 | < 8 | < 2 | 4 | 4 | < .5 | < 3 | < 3 | 50 | 0.03 | 0.098 | 22 | 32 |
| MP027150 | < 1 | 4 | 23 | 44 | < .3 | 4 | 1 | 129 | 3.47 | 12 | < 8 | < 2 | 3 | 5 | < .5 | < 3 | < 3 | 48 | 0.03 | 0.062 | 26 | 15 |
| MP027149 | < 1 | 4 | 23 | 36 | < .3 | 4 | 2 | 128 | 1.04 | 7 | < 8 | < 2 | 2 | 7 | < .5 | < 3 | < 3 | 32 | 0.08 | 0.02 | 33 | 10 |
| MP027148 | 1 | 12 | 38 | 59 | < .3 | 9 | 4 | 302 | 2.35 | 18 | < 8 | < 2 | 2 | 7 | < .5 | < 3 | < 3 | 45 | 0.05 | 0.046 | 32 | 16 |
| MP027147 | < 1 | 22 | 55 | 111 | < .3 | 9 | 9 | 354 | 3.15 | 34 | < 8 | < 2 | 3 | 10 | < .5 | < 3 | < 3 | 41 | 0.1 | 0.102 | 32 | 20 |
| MP027146 | < 1 | 14 | 28 | 139 | 0.5 | 15 | 6 | 260 | 2.98 | 17 | < 8 | < 2 | 4 | 5 | < .5 | < 3 | < 3 | 28 | 0.05 | 0.103 | 23 | 25 |
| MP027145 | < 1 | 5 | 20 | 44 | < .3 | 7 | 2 | 119 | 2.79 | 15 | < 8 | < 2 | 3 | 5 | < .5 | < 3 | < 3 | 41 | 0.04 | 0.122 | 21 | 19 |
| MP027144 | < 1 | 8 | 25 | 60 | < .3 | 9 | 4 | 410 | 3.73 | 16 | < 8 | < 2 | 4 | 6 | < .5 | < 3 | < 3 | 50 | 0.05 | 0.121 | 21 | 26 |
| MP027143 | < 1 | 13 | 25 | 69 | < .3 | 10 | 4 | 519 | 3.94 | 20 | < 8 | < 2 | 5 | 4 | < .5 | < 3 | < 3 | 51 | 0.03 | 0.193 | 15 | 34 |
| MP027142 | < 1 | 9 | 34 | 71 | < .3 | 9 | 4 | 267 | 3.66 | 18 | < 8 | < 2 | 5 | 5 | < .5 | < 3 | < 3 | 52 | 0.04 | 0.167 | 20 | 27 |
| **Line 2** | | | | | | | | | | | | | | | | | | | | | | |
| MP027153 | < 1 | 6 | 20 | 41 | 0.3 | 5 | 2 | 267 | 4.67 | 12 | < 8 | < 2 | 3 | 3 | < .5 | 3 | < 3 | 67 | 0.03 | 0.274 | 26 | 19 |
| MP027154 | 1 | 11 | 24 | 89 | 0.7 | 10 | 4 | 456 | 5.6 | 4 | < 8 | < 2 | 5 | 3 | 0.5 | < 3 | < 3 | 78 | 0.03 | 0.217 | 19 | 40 |
| MP027155 | < 1 | 9 | 23 | 56 | 0.6 | 8 | 3 | 443 | 5.05 | 6 | < 8 | < 2 | 3 | 4 | < .5 | 4 | < 3 | 67 | 0.03 | 0.166 | 23 | 30 |
| MP027156 | < 1 | 8 | 22 | 48 | 0.4 | 8 | 3 | 350 | 3.72 | 8 | < 8 | < 2 | 3 | 4 | < .5 | 3 | < 3 | 53 | 0.04 | 0.114 | 24 | 21 |
| MP027157 | < 1 | 7 | 27 | 30 | 0.4 | 4 | 1 | 95 | 3.33 | 8 | < 8 | < 2 | 4 | 3 | < .5 | < 3 | < 3 | 38 | 0.02 | 0.082 | 27 | 17 |
| MP027158 | < 1 | 12 | 38 | 70 | 0.5 | 8 | 5 | 788 | 5.21 | 13 | < 8 | < 2 | 5 | 4 | < .5 | 3 | < 3 | 51 | 0.03 | 0.212 | 27 | 30 |
| MP027159 | < 1 | 13 | 46 | 58 | 0.4 | 6 | 3 | 503 | 6.05 | 12 | < 8 | < 2 | 5 | 4 | < .5 | 3 | < 3 | 70 | 0.04 | 0.211 | 21 | 28 |
| MP027160 | < 1 | 14 | 48 | 83 | 0.3 | 11 | 4 | 275 | 3.5 | 20 | < 8 | < 2 | 4 | 5 | < .5 | < 3 | < 3 | 49 | 0.03 | 0.144 | 23 | 26 |
| MP027161 | < 1 | 12 | 56 | 64 | 0.5 | 6 | 4 | 506 | 3.13 | 8 | < 8 | < 2 | 2 | 4 | < .5 | < 3 | < 3 | 43 | 0.03 | 0.145 | 25 | 20 |
| MP027162 | 1 | 8 | 43 | 52 | 0.3 | 4 | 2 | 600 | 5.37 | 8 | < 8 | < 2 | 8 | 3 | < .5 | < 3 | < 3 | 52 | 0.02 | 0.199 | 20 | 32 |
| MP027163 | < 1 | 6 | 25 | 54 | 0.5 | 5 | 2 | 294 | 4.59 | 12 | < 8 | < 2 | 4 | 5 | < .5 | < 3 | < 3 | 65 | 0.07 | 0.16 | 20 | 20 |
| **Line 3** | | | | | | | | | | | | | | | | | | | | | | |
| MP027170 | < 1 | 7 | 27 | 64 | 0.4 | 7 | 3 | 507 | 5.09 | 15 | < 8 | < 2 | 4 | 3 | < .5 | < 3 | < 3 | 56 | 0.02 | 0.176 | 27 | 22 |
| MP027169 | < 1 | 5 | 17 | 50 | 0.4 | 4 | 2 | 397 | 2.99 | 8 | < 8 | < 2 | 3 | 4 | < .5 | < 3 | < 3 | 35 | 0.04 | 0.094 | 28 | 16 |
| MP027168 | < 1 | 14 | 21 | 124 | < .3 | 4 | 1 | 135 | 0.4 | < 2 | < 8 | < 2 | < 2 | 59 | 5.1 | < 3 | < 3 | 9 | 1.25 | 0.08 | 15 | 6 |
| MP027167 | < 1 | 11 | 27 | 43 | < .3 | 8 | 3 | 198 | 3.76 | 17 | < 8 | < 2 | 5 | 5 | 0.5 | < 3 | < 3 | 57 | 0.06 | 0.106 | 25 | 24 |
| MP027166 | < 1 | 8 | 20 | 51 | 0.4 | 8 | 3 | 219 | 4.2 | 12 | < 8 | < 2 | 3 | 5 | < .5 | 4 | < 3 | 67 | 0.04 | 0.268 | 25 | 25 |
| MP027165 | < 1 | 15 | 22 | 90 | 0.4 | 13 | 5 | 477 | 3.99 | 16 | < 8 | < 2 | 5 | 5 | 0.5 | < 3 | < 3 | 53 | 0.03 | 0.121 | 23 | 32 |
| MP027164 | < 1 | 19 | 33 | 66 | 0.3 | 6 | 2 | 253 | 4.92 | 35 | < 8 | < 2 | 6 | 2 | < .5 | < 3 | < 3 | 59 | 0.01 | 0.208 | 24 | 23 |
| MP027171 | < 1 | 13 | 55 | 79 | 0.5 | 10 | 5 | 411 | 5.37 | 19 | < 8 | < 2 | 5 | 5 | < .5 | 3 | < 3 | 65 | 0.02 | 0.139 | 21 | 32 |
| MP027172 | < 1 | 25 | 70 | 96 | 0.3 | 8 | 5 | 421 | 4.48 | 31 | < 8 | < 2 | 7 | 4 | 0.7 | 3 | 4 | 45 | 0.03 | 0.13 | 17 | 31 |
| MP027173 | < 1 | 9 | 21 | 86 | 0.7 | 5 | 4 | 364 | 2.84 | 17 | < 8 | < 2 | 3 | 4 | 0.6 | 5 | < 3 | 47 | 0.02 | 0.092 | 22 | 21 |
| MP027174 | < 1 | 7 | 34 | 50 | 0.5 | 5 | 3 | 215 | 3.9 | 15 | < 8 | < 2 | 5 | 5 | < .5 | 3 | < 3 | 65 | 0.03 | 0.092 | 21 | 20 |

Appendix 7c. Conventional geochemical analysis of B-horizon soil samples, Camel Back massive sulphide deposit, Bathurst Mining Camp, 21 O/9, New Brunswick - (ICP-ES)

| SAMPLEID | Mg | Ba | Ti | B | Al | Na | K | W |
|---|---|---|---|---|---|---|---|---|
| Det. Limit | 0.01 | 1 | 0.01 | 3 | 0.01 | 0.01 | 0.01 | 2 |
| Unit | pct | ppm | pct | ppm | pct | pct | pct | ppm |
| **Line 1** | | | | | | | | |
| MP027152 | 0.35 | 67 | 0.07 | < 3 | 1.73 | < .01 | 0.11 | 2 |
| MP027151 | 0.26 | 49 | 0.04 | < 3 | 2.63 | 0.01 | 0.07 | < 2 |
| MP027150 | 0.14 | 39 | 0.06 | < 3 | 1.35 | < .01 | 0.05 | < 2 |
| MP027149 | 0.19 | 39 | 0.05 | < 3 | 0.88 | 0.01 | 0.11 | < 2 |
| MP027148 | 0.35 | 56 | 0.05 | < 3 | 1.34 | < .01 | 0.12 | < 2 |
| MP027147 | 0.34 | 126 | 0.04 | < 3 | 1.4 | < .01 | 0.1 | < 2 |
| MP027146 | 0.44 | 55 | 0.03 | < 3 | 2.34 | < .01 | 0.1 | < 2 |
| MP027145 | 0.19 | 39 | 0.04 | < 3 | 1.76 | < .01 | 0.05 | < 2 |
| MP027144 | 0.27 | 51 | 0.06 | < 3 | 2.43 | < .01 | 0.07 | < 2 |
| MP027143 | 0.3 | 43 | 0.05 | < 3 | 3.59 | < .01 | 0.07 | < 2 |
| MP027142 | 0.31 | 44 | 0.05 | < 3 | 3 | < .01 | 0.07 | < 2 |
| **Line 2** | | | | | | | | |
| MP027153 | 0.18 | 33 | 0.04 | < 3 | 1.62 | < .01 | 0.07 | 2 |
| MP027154 | 0.32 | 65 | 0.07 | < 3 | 3.33 | < .01 | 0.06 | 2 |
| MP027155 | 0.3 | 45 | 0.04 | < 3 | 2.29 | < .01 | 0.05 | < 2 |
| MP027156 | 0.23 | 52 | 0.06 | < 3 | 1.54 | < .01 | 0.06 | < 2 |
| MP027157 | 0.16 | 29 | 0.02 | < 3 | 1.52 | < .01 | 0.05 | < 2 |
| MP027158 | 0.39 | 47 | 0.02 | < 3 | 2.18 | < .01 | 0.09 | 2 |
| MP027159 | 0.23 | 50 | 0.07 | < 3 | 2.62 | < .01 | 0.05 | 5 |
| MP027160 | 0.32 | 48 | 0.05 | < 3 | 3.11 | < .01 | 0.08 | < 2 |
| MP027161 | 0.27 | 57 | 0.04 | < 3 | 1.77 | < .01 | 0.08 | < 2 |
| MP027162 | 0.12 | 47 | 0.02 | < 3 | 2.29 | < .01 | 0.06 | 2 |
| MP027163 | 0.21 | 38 | 0.07 | < 3 | 1.54 | < .01 | 0.07 | < 2 |
| **Line 3** | | | | | | | | |
| MP027170 | 0.28 | 41 | 0.04 | < 3 | 2.1 | < .01 | 0.07 | 4 |
| MP027169 | 0.19 | 55 | 0.02 | < 3 | 1.53 | < .01 | 0.06 | < 2 |
| MP027168 | 0.15 | 111 | < .01 | 3 | 0.61 | 0.01 | 0.03 | < 2 |
| MP027167 | 0.25 | 61 | 0.07 | < 3 | 1.54 | < .01 | 0.08 | < 2 |
| MP027166 | 0.26 | 44 | 0.05 | < 3 | 2.19 | < .01 | 0.06 | < 2 |
| MP027165 | 0.45 | 49 | 0.05 | < 3 | 2.22 | 0.01 | 0.08 | < 2 |
| MP027164 | 0.33 | 46 | 0.03 | < 3 | 2.44 | < .01 | 0.08 | < 2 |
| MP027171 | 0.44 | 47 | 0.07 | < 3 | 2.3 | < .01 | 0.07 | < 2 |
| MP027172 | 0.28 | 58 | 0.04 | < 3 | 3.74 | < .01 | 0.05 | 2 |
| MP027173 | 0.28 | 56 | 0.04 | < 3 | 2.74 | < .01 | 0.06 | 2 |
| MP027174 | 0.23 | 32 | 0.09 | < 3 | 1.79 | < .01 | 0.06 | < 2 |

## Appendix 8a. Conventional versus QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS) and (ICP-ES)

| SAMPLEID | Cu | Cu Q | Pb | Pb Q | Zn | Zn Q | Ag | Ag Q | As | As Q | Cd | Cd Q | Sb | Sb Q | Bi | Bi Q | Au | Au Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det.Limit | 1.00 | 0.01 | 3.00 | 0.01 | 1.00 | 0.10 | 0.30 | 2.00 | 2.00 | 0.10 | 0.50 | 0.01 | 3.00 | 0.02 | 3.00 | 0.02 | 2.00 | 0.20 |
| Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppb |
| **Line 1** | | | | | | | | | | | | | | | | | | |
| MP027056 | 5.00 | 12.27 | 8.00 | 24.59 | 35.00 | 104.27 | < .3 | 162.33 | 5.00 | 11.56 | < .5 | 0.12 | < 3 | 0.26 | < 3 | 0.71 | < 2 | 5.30 |
| MP027055 | 5.00 | 10.16 | 10.00 | 18.68 | 25.00 | 69.96 | < .3 | 691.76 | 7.00 | 14.95 | < .5 | 0.11 | < 3 | 0.29 | < 3 | 0.53 | < 2 | 6.03 |
| MP027054 | 20.00 | 57.36 | 6.00 | 46.38 | 26.00 | 84.70 | < .3 | 1298.88 | 3.00 | 37.58 | 0.70 | 0.35 | < 3 | 0.39 | < 3 | 1.48 | < 2 | 0.73 |
| MP027053 | 17.00 | 69.37 | 19.00 | 90.81 | 46.00 | 241.09 | < .3 | 256.89 | 14.00 | 66.93 | < .5 | 0.70 | < 3 | 0.82 | < 3 | 3.43 | < 2 | 0.25 |
| MP027052 | 12.00 | 27.81 | 13.00 | 34.26 | 42.00 | 119.95 | 0.30 | 341.00 | 10.00 | 22.81 | < .5 | 0.19 | < 3 | 0.39 | < 3 | 0.96 | < 2 | 0.12 |
| MP027051 | 7.00 | 14.33 | 12.00 | 31.43 | 27.00 | 107.32 | < .3 | 130.73 | 7.00 | 23.75 | < .5 | 0.22 | < 3 | 0.20 | < 3 | 1.13 | < 2 | 1.39 |
| MP027050 | 10.00 | 21.46 | 15.00 | 34.58 | 33.00 | 95.46 | < .3 | 293.30 | 8.00 | 29.59 | < .5 | 0.13 | < 3 | 0.37 | < 3 | 0.62 | < 2 | 7.89 |
| MP027057 | 7.00 | 15.84 | 10.00 | 27.23 | 39.00 | 113.45 | < .3 | 258.07 | 7.00 | 25.17 | < .5 | 0.17 | < 3 | 0.33 | < 3 | 0.59 | < 2 | 3.39 |
| MP027058 | 3.00 | 6.51 | 14.00 | 24.79 | 33.00 | 65.54 | < .3 | 61.48 | 11.00 | 25.11 | < .5 | 0.13 | < 3 | 0.12 | < 3 | 0.64 | < 2 | 1.18 |
| MP027059 | 4.00 | 13.40 | 16.00 | 60.66 | 28.00 | 125.80 | < .3 | 45.90 | 16.00 | 125.80 | < .5 | 0.27 | < 3 | 0.46 | < 3 | 0.61 | < 2 | 13.94 |
| MP027060 | 5.00 | 6.55 | 9.00 | 11.63 | 28.00 | 48.89 | < .3 | 34.92 | 11.00 | 15.83 | < .5 | 0.08 | < 3 | 0.20 | < 3 | 0.41 | < 2 | 5.59 |
| MP027061 | 9.00 | 33.08 | 15.00 | 36.25 | 44.00 | 160.95 | 0.40 | 300.85 | 27.00 | 76.28 | < .5 | 0.35 | < 3 | 0.51 | < 3 | 0.84 | < 2 | 5.43 |
| MP027062 | 8.00 | 11.94 | 12.00 | 22.31 | 78.00 | 142.52 | 0.30 | 216.08 | 17.00 | 21.33 | < .5 | 0.12 | < 3 | 0.35 | < 3 | 0.50 | < 2 | 2.35 |
| **Line 2** | | | | | | | | | | | | | | | | | | |
| MP027049 | 10.00 | 35.83 | 13.00 | 55.12 | 23.00 | 117.10 | < .3 | 487.90 | 9.00 | 38.75 | < .5 | 0.25 | < 3 | 0.42 | < 3 | 1.58 | < 2 | 9.48 |
| MP027048 | 11.00 | 17.63 | 13.00 | 24.60 | 36.00 | 86.71 | < .3 | 86.25 | 6.00 | 17.71 | < .5 | 0.09 | < 3 | 0.13 | < 3 | 1.05 | < 2 | 1.04 |
| MP027047 | 6.00 | 20.77 | 13.00 | 38.72 | 40.00 | 168.28 | < .3 | 196.98 | 9.00 | 35.27 | < .5 | 0.34 | < 3 | 0.17 | < 3 | 0.61 | < 2 | 2.25 |
| MP027046 | 9.00 | 21.64 | 13.00 | 33.37 | 40.00 | 116.17 | 0.30 | 294.98 | 6.00 | 19.43 | < .5 | 0.17 | < 3 | 0.24 | < 3 | 1.56 | < 2 | 2.38 |
| MP027045 | 5.00 | 8.90 | 8.00 | 18.38 | 31.00 | 66.60 | < .3 | 85.00 | 5.00 | 16.80 | < .5 | 0.09 | < 3 | 0.16 | < 3 | 1.35 | < 2 | 6.60 |
| MP027044 | 3.00 | 1.99 | 5.00 | 7.03 | 14.00 | 18.60 | < .3 | 51.00 | 3.00 | 3.40 | < .5 | 0.07 | < 3 | 0.05 | < 3 | 0.94 | < 2 | 5.90 |
| MP027043 | 10.00 | 19.62 | 16.00 | 39.54 | 42.00 | 120.70 | < .3 | 229.63 | 20.00 | 51.52 | < .5 | 0.18 | < 3 | 0.46 | < 3 | 0.25 | < 2 | 3.68 |
| MP027042 | 8.00 | 13.92 | 11.00 | 24.56 | 42.00 | 93.32 | < .3 | 56.90 | 10.00 | 21.28 | < .5 | 0.10 | < 3 | 0.34 | < 3 | 0.44 | < 2 | 5.12 |
| MP027041 | 10.00 | 27.60 | 13.00 | 56.08 | 71.00 | 299.84 | < .3 | 463.39 | 17.00 | 63.19 | < .5 | 0.47 | < 3 | 0.82 | < 3 | 0.71 | < 2 | 4.71 |
| MP027040 | 14.00 | 26.72 | 16.00 | 38.87 | 68.00 | 151.59 | < .3 | 75.04 | 16.00 | 39.24 | < .5 | 0.42 | < 3 | 0.38 | < 3 | 1.16 | < 2 | 0.10 |
| MP027039 | 12.00 | 24.41 | 62.00 | 165.54 | 291.00 | 755.42 | < .3 | 236.21 | 53.00 | 164.00 | 1.30 | 2.68 | < 3 | 0.85 | < 3 | 0.66 | < 2 | 1.79 |
| MP027038 | 9.00 | 28.97 | 34.00 | 146.59 | 202.00 | 907.18 | < .3 | 222.20 | 26.00 | 111.30 | < .5 | 1.13 | < 3 | 0.38 | 3.00 | 1.59 | < 2 | 1.01 |
| **Line 3** | | | | | | | | | | | | | | | | | | |
| MP027006 | 4.00 | 9.84 | 10.00 | 28.88 | 24.00 | 84.07 | 0.30 | 293.30 | 6.00 | 24.97 | < .5 | 0.13 | 4.00 | 0.22 | < 3 | 0.73 | < 2 | 10.89 |
| MP027005 | 6.00 | 20.36 | 14.00 | 44.06 | 48.00 | 164.92 | < .3 | 130.73 | 10.00 | 35.87 | < .5 | 0.23 | 3.00 | 0.74 | < 3 | 1.06 | < 2 | 14.41 |
| MP027004 | 6.00 | 23.62 | 11.00 | 46.60 | 86.00 | 309.44 | 0.30 | 341.00 | 6.00 | 35.37 | < .5 | 0.68 | 3.00 | 0.44 | < 3 | 1.44 | < 2 | 3.39 |
| MP027003 | 6.00 | 21.47 | 14.00 | 40.47 | 98.00 | 325.92 | < .3 | 256.89 | 3.00 | 27.58 | < .5 | 0.52 | 4.00 | 0.33 | < 3 | 1.15 | < 2 | 5.83 |
| MP027002 | 31.00 | 112.75 | 15.00 | 64.38 | 121.00 | 530.11 | 0.60 | 1298.88 | 95.00 | 430.85 | < .5 | 0.56 | 4.00 | 3.13 | < 3 | 1.23 | < 2 | 42.94 |
| MP027001 | 13.00 | 45.88 | 10.00 | 52.93 | 88.00 | 367.41 | 0.50 | 691.76 | 34.00 | 145.86 | < .5 | 0.78 | 3.00 | 1.89 | < 3 | 1.34 | < 2 | 28.39 |
| MP027000 | 6.00 | 10.72 | 13.00 | 21.42 | 69.00 | 120.42 | 0.30 | 162.33 | 16.00 | 34.27 | < .5 | 0.29 | 4.00 | 0.38 | < 3 | 0.66 | < 2 | 6.47 |
| MP027007 | 13.00 | 25.15 | 18.00 | 32.85 | 188.00 | 398.37 | 0.40 | 258.07 | 132.00 | 322.39 | 0.50 | 0.55 | 4.00 | 0.84 | < 3 | 1.64 | < 2 | 1.83 |
| MP027008 | 11.00 | 28.81 | 12.00 | 39.03 | 107.00 | 308.75 | 0.60 | 329.04 | 19.00 | 61.60 | < .5 | 0.62 | 3.00 | 0.64 | < 3 | 1.35 | < 2 | 1.10 |
| MP027009 | 15.00 | 37.53 | 13.00 | 32.28 | 96.00 | 258.96 | 0.70 | 595.66 | 19.00 | 57.67 | < .5 | 0.51 | < 3 | 0.49 | < 3 | 0.92 | < 2 | 1.11 |
| MP027010 | 8.00 | 27.22 | 12.00 | 46.04 | 120.00 | 345.01 | 0.50 | 418.95 | 8.00 | 47.78 | < .5 | 0.41 | < 3 | 0.84 | < 3 | 0.90 | < 2 | 5.29 |
| MP027011 | 20.00 | 71.13 | 15.00 | 56.12 | 126.00 | 513.89 | 0.40 | 356.16 | 28.00 | 123.38 | < .5 | 0.89 | 3.00 | 1.20 | < 3 | 1.20 | < 2 | 0.76 |
| MP027012 | 10.00 | 37.44 | 23.00 | 81.72 | 57.00 | 248.28 | < .3 | 192.42 | 22.00 | 117.03 | < .5 | 0.34 | < 3 | 0.88 | < 3 | 1.41 | < 2 | 0.86 |
| **Line 4** | | | | | | | | | | | | | | | | | | |
| MP027019 | 12.00 | 44.33 | 7.00 | 45.14 | 91.00 | 455.84 | < .3 | 122.10 | 19.00 | 93.61 | < .5 | 0.44 | < 3 | 1.92 | < 3 | 1.04 | < 2 | 37.74 |
| MP027018 | 7.00 | 15.60 | 11.00 | 30.35 | 41.00 | 113.10 | < .3 | 107.35 | 9.00 | 26.76 | < .5 | 0.39 | < 3 | 0.21 | < 3 | 0.60 | < 2 | 5.59 |
| MP027017 | 7.00 | 15.60 | 15.00 | 28.94 | 83.00 | 194.83 | 0.50 | 464.11 | 6.00 | 20.43 | < .5 | 0.41 | < 3 | 0.36 | < 3 | 0.76 | < 2 | 8.40 |
| MP027016 | 4.00 | 8.39 | 13.00 | 18.95 | 70.00 | 107.80 | < .3 | 141.00 | 6.00 | 12.40 | < .5 | 0.20 | < 3 | 0.16 | < 3 | 0.69 | < 2 | 1.70 |
| MP027015 | 18.00 | 68.11 | 13.00 | 57.13 | 133.00 | 584.64 | 0.60 | 1022.40 | 342.00 | 1568.52 | < .5 | 0.97 | 3.00 | 2.52 | < 3 | 1.33 | < 2 | 23.76 |
| MP027014 | 11.00 | 27.45 | 17.00 | 48.62 | 92.00 | 245.62 | 0.30 | 306.72 | 9.00 | 41.91 | < .5 | 0.34 | < 3 | 0.40 | < 3 | 1.75 | < 2 | 0.12 |
| MP027013 | 5.00 | 9.50 | 11.00 | 20.85 | 34.00 | 77.40 | < .3 | 75.00 | 6.00 | 18.80 | < .5 | 0.13 | < 3 | 0.22 | < 3 | 1.11 | < 2 | 9.20 |
| MP027020 | 9.00 | 32.70 | 16.00 | 53.54 | 62.00 | 214.42 | 0.50 | 489.60 | 13.00 | 55.87 | < .5 | 0.45 | < 3 | 0.58 | < 3 | 1.79 | < 2 | 2.59 |
| MP027021 | 7.00 | 17.64 | 11.00 | 32.53 | 39.00 | 122.49 | < .3 | 172.55 | 50.00 | 149.73 | < .5 | 0.31 | < 3 | 0.26 | < 3 | 0.90 | < 2 | 2.42 |
| MP027022 | 20.00 | 70.24 | 18.00 | 65.45 | 72.00 | 294.04 | 0.50 | 738.99 | 48.00 | 204.31 | < .5 | 0.75 | < 3 | 2.30 | < 3 | 1.61 | < 2 | 1.55 |
| MP027023 | 15.00 | 32.61 | 8.00 | 29.50 | 125.00 | 281.07 | 0.30 | 287.87 | 14.00 | 40.23 | < .5 | 0.38 | < 3 | 0.98 | < 3 | 0.63 | < 2 | 7.33 |
| MP027024 | 14.00 | 26.54 | 9.00 | 24.35 | 86.00 | 169.48 | 0.40 | 180.64 | 19.00 | 40.95 | < .5 | 0.21 | < 3 | 0.50 | < 3 | 0.45 | < 2 | 2.08 |
| MP027025 | 1.00 | 1.48 | 12.00 | 9.82 | 6.00 | 10.80 | < .3 | 26.00 | < 2 | 2.20 | < .5 | 0.07 | < 3 | 0.09 | < 3 | 0.21 | < 2 | 4.10 |
| **Line 5** | | | | | | | | | | | | | | | | | | |
| MP027027 | 5.00 | 15.54 | 14.00 | 36.49 | 71.00 | 300.05 | < .3 | 104.34 | 5.00 | 17.20 | < .5 | 0.16 | < 3 | 0.45 | < 3 | 0.94 | < 2 | 1.27 |
| MP027026 | 5.00 | 13.60 | 21.00 | 75.05 | 48.00 | 146.38 | < .3 | 106.90 | 5.00 | 24.09 | < .5 | 0.39 | < 3 | 0.28 | < 3 | 1.03 | < 2 | 6.70 |
| MP027028 | 11.00 | 8.97 | 16.00 | 14.93 | 55.00 | 61.60 | < .3 | 73.00 | 4.00 | 5.90 | < .5 | 0.13 | < 3 | 0.19 | < 3 | 0.34 | < 2 | 5.10 |
| MP027029 | 3.00 | 3.28 | 13.00 | 12.23 | 39.00 | 40.10 | < .3 | 37.00 | 3.00 | 6.10 | < .5 | 0.07 | < 3 | 0.20 | < 3 | 0.31 | < 2 | 3.20 |
| MP027030 | 16.00 | 41.84 | 21.00 | 72.45 | 74.00 | 300.03 | 0.30 | 286.16 | 50.00 | 202.21 | 0.50 | 1.21 | < 3 | 1.52 | < 3 | 2.44 | < 2 | 2.92 |
| MP027031 | 13.00 | 28.33 | 16.00 | 44.95 | 59.00 | 169.32 | < .3 | 116.86 | 37.00 | 133.86 | < .5 | 0.46 | < 3 | 0.48 | < 3 | 2.74 | < 2 | 3.59 |
| MP027032 | 10.00 | 21.74 | 24.00 | 60.04 | 56.00 | 163.30 | 0.30 | 242.00 | 10.00 | 71.10 | 0.60 | 0.63 | 3.00 | 0.40 | < 3 | 1.67 | < 2 | 0.50 |
| MP027033 | 13.00 | 42.15 | 24.00 | 86.80 | 79.00 | 353.00 | 0.30 | 415.07 | 44.00 | 256.09 | 0.70 | 1.45 | < 3 | 0.29 | < 3 | 3.54 | < 2 | 0.19 |
| MP027034 | 9.00 | 16.72 | 17.00 | 38.31 | 59.00 | 183.09 | < .3 | 247.33 | 11.00 | 51.35 | < .5 | 0.32 | < 3 | 0.28 | < 3 | 1.97 | < 2 | 0.10 |
| MP027035 | 7.00 | 12.76 | 13.00 | 51.11 | 50.00 | 128.59 | < .3 | 134.53 | 12.00 | 51.99 | < .5 | 0.38 | < 3 | 0.24 | < 3 | 0.93 | < 2 | 1.09 |

Appendix 8a. Conventional versus QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS) and (ICP-ES)

| SAMPLEID | Cu | Cu Q | Pb | Pb Q | Zn | Zn Q | Ag | Ag Q | As | As Q | Cd | Cd Q | Sb | Sb Q | Bi | Bi Q | Au | Au Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det.Limit | 1.00 | 0.01 | 3.00 | 0.01 | 1.00 | 0.10 | 0.30 | 2.00 | 2.00 | 0.10 | 0.50 | 0.01 | 3.00 | 0.02 | 3.00 | 0.02 | 2.00 | 0.20 |
| Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppb |
| MP027036 | 10.00 | 22.49 | 19.00 | 65.59 | 62.00 | 184.82 | 0.30 | 152.21 | 16.00 | 54.96 | 0.50 | 0.70 | < 3 | 0.37 | < 3 | 1.06 | < 2 | 0.12 |
| MP027037 | 15.00 | 41.61 | 21.00 | 75.50 | 74.00 | 256.34 | 0.30 | 393.12 | 19.00 | 86.36 | 0.60 | 1.10 | 3.00 | 0.62 | < 3 | 1.72 | < 2 | 0.12 |
| **Line 6** | | | | | | | | | | | | | | | | | | |
| MP027101 | 12.00 | 19.31 | 19.00 | 53.23 | 88.00 | 136.89 | < .3 | 408.24 | 25.00 | 50.54 | < .5 | 0.19 | < 3 | 1.00 | < 3 | 0.97 | | |
| MP027100 | 16.00 | 36.03 | 28.00 | 80.80 | 108.00 | 286.45 | 1.30 | 307.33 | 24.00 | 82.58 | 0.50 | 0.49 | < 3 | 1.22 | < 3 | 1.27 | | |
| MP027099 | 5.00 | 13.48 | 16.00 | 38.72 | 42.00 | 99.91 | 0.30 | 303.66 | 15.00 | 36.62 | < .5 | 0.14 | < 3 | 0.67 | < 3 | 0.76 | | |
| MP027098 | 7.00 | 12.17 | 13.00 | 23.74 | 41.00 | 78.62 | 0.30 | 265.59 | 14.00 | 22.70 | < .5 | 0.14 | < 3 | 0.34 | < 3 | 0.40 | | |
| MP027097 | 15.00 | 26.14 | 17.00 | 32.12 | 88.00 | 186.49 | 0.30 | 224.99 | 22.00 | 41.98 | < .5 | 0.24 | 4.00 | 0.69 | < 3 | 0.65 | | |
| MP027096 | 16.00 | 46.09 | 18.00 | 63.55 | 67.00 | 247.87 | 0.30 | 462.27 | 24.00 | 73.45 | < .5 | 0.34 | 3.00 | 1.28 | < 3 | 1.33 | | |
| MP027095 | 9.00 | 17.85 | 13.00 | 28.01 | 90.00 | 186.04 | 0.30 | 286.34 | 13.00 | 27.12 | < .5 | 0.23 | 3.00 | 0.55 | 3.00 | 0.65 | | |
| MP027094 | 12.00 | 36.77 | 20.00 | 77.40 | 107.00 | 382.96 | 0.30 | 431.41 | 21.00 | 76.59 | < .5 | 0.32 | 3.00 | 1.11 | < 3 | 1.50 | | |
| MP027093 | 9.00 | 33.50 | 22.00 | 77.72 | 72.00 | 277.41 | 0.50 | 912.00 | 22.00 | 79.14 | < .5 | 0.61 | 3.00 | 1.27 | < 3 | 1.84 | | |
| MP027092 | 1.00 | 1.18 | 11.00 | 8.72 | 13.00 | 14.60 | < .3 | 19.00 | 6.00 | 4.00 | < .5 | 0.04 | < 3 | 0.14 | < 3 | 0.21 | | |
| MP027091 | 7.00 | 11.48 | 23.00 | 41.87 | 31.00 | 62.20 | < .3 | 133.00 | 5.00 | 28.00 | < .5 | 0.27 | < 3 | 0.44 | < 3 | 0.67 | | |
| MP027090 | 3.00 | 1.69 | 8.00 | 7.73 | 20.00 | 22.10 | < .3 | 23.00 | < 2 | 2.60 | < .5 | 0.09 | < 3 | 0.11 | < 3 | 0.16 | | |
| MP027089 | 3.00 | 2.68 | 18.00 | 16.82 | 22.00 | 28.10 | < .3 | 62.00 | < 2 | 3.70 | < .5 | 0.11 | < 3 | 0.18 | 4.00 | 0.32 | | |
| **Line 7** | | | | | | | | | | | | | | | | | | |
| MP027075 | 9.00 | 17.97 | 18.00 | 35.66 | 58.00 | 119.74 | < .3 | 217.84 | 12.00 | 29.53 | < .5 | 0.16 | < 3 | 0.69 | < 3 | 0.72 | | |
| MP027074 | 27.00 | 72.91 | 13.00 | 37.60 | 31.00 | 90.93 | 0.60 | 952.32 | 14.00 | 38.86 | < .5 | 0.29 | < 3 | 0.41 | < 3 | 0.78 | | |
| MP027073 | 9.00 | 15.25 | 15.00 | 29.20 | 44.00 | 101.48 | < .3 | 247.86 | 14.00 | 23.33 | < .5 | 0.22 | < 3 | 0.15 | < 3 | 0.51 | | |
| MP027072 | 7.00 | 13.59 | 8.00 | 24.05 | 45.00 | 99.68 | 0.40 | 315.62 | 9.00 | 23.93 | < .5 | 0.18 | < 3 | 0.19 | < 3 | 0.40 | | |
| MP027071 | 15.00 | 46.52 | 16.00 | 48.70 | 88.00 | 277.40 | 0.60 | 761.67 | 19.00 | 61.75 | < .5 | 0.31 | < 3 | 0.64 | < 3 | 0.88 | | |
| MP027070 | 5.00 | 9.50 | 12.00 | 18.26 | 38.00 | 76.51 | < .3 | 86.66 | 8.00 | 16.71 | < .5 | 0.07 | < 3 | 0.14 | < 3 | 0.37 | | |
| MP027069 | 9.00 | 13.00 | 18.00 | 23.76 | 50.00 | 72.70 | 0.30 | 167.00 | 18.00 | 21.30 | < .5 | 0.14 | < 3 | 0.27 | < 3 | 0.52 | | |
| MP027068 | 8.00 | 6.79 | 12.00 | 11.24 | 59.00 | 58.50 | < .3 | 47.00 | 10.00 | 10.20 | < .5 | 0.05 | < 3 | 0.15 | < 3 | 0.30 | | |
| MP027067 | 2.00 | 1.94 | 11.00 | 10.78 | 21.00 | 24.00 | < .3 | 62.00 | < 2 | 3.40 | < .5 | 0.06 | < 3 | 0.12 | < 3 | 0.18 | | |
| MP027066 | 6.00 | 25.11 | 23.00 | 75.11 | 43.00 | 189.73 | 0.30 | 419.04 | 23.00 | 76.24 | < .5 | 0.26 | < 3 | 0.79 | < 3 | 1.63 | | |
| MP027065 | 4.00 | 3.00 | 21.00 | 20.29 | 15.00 | 20.20 | < .3 | 97.00 | 2.00 | 4.30 | < .5 | 0.15 | < 3 | 0.14 | < 3 | 0.20 | | |
| MP027064 | 2.00 | 4.43 | 15.00 | 32.31 | 15.00 | 48.79 | < .3 | 74.10 | 3.00 | 23.48 | < .5 | 0.07 | < 3 | 0.22 | < 3 | 0.48 | | |
| MP027063 | 3.00 | 7.40 | 18.00 | 32.82 | 18.00 | 52.90 | < .3 | 94.22 | 9.00 | 10.23 | < .5 | 0.09 | < 3 | 0.16 | < 3 | 0.73 | | |
| **Line 8** | | | | | | | | | | | | | | | | | | |
| MP027076 | 6.00 | 19.95 | 15.00 | 50.49 | 28.00 | 130.48 | < .3 | 240.28 | 20.00 | 64.26 | < .5 | 0.25 | < 3 | 1.54 | < 3 | 1.93 | | |
| MP027077 | 5.00 | 9.00 | 13.00 | 18.96 | 27.00 | 67.44 | < .3 | 108.04 | 14.00 | 27.17 | < .5 | 0.13 | < 3 | 0.44 | < 3 | 0.64 | | |
| MP027078 | 7.00 | 19.58 | 12.00 | 33.90 | 67.00 | 180.23 | 0.30 | 320.82 | 17.00 | 40.34 | < .5 | 0.19 | < 3 | 0.54 | < 3 | 0.87 | | |
| MP027079 | 18.00 | 26.42 | 17.00 | 28.18 | 78.00 | 115.96 | 0.60 | 385.73 | 19.00 | 33.84 | < .5 | 0.19 | < 3 | 0.57 | < 3 | 0.46 | | |
| MP027080 | 9.00 | 26.32 | 12.00 | 37.68 | 83.00 | 257.42 | 0.80 | 957.67 | 13.00 | 40.07 | < .5 | 0.41 | < 3 | 0.27 | < 3 | 0.95 | | |
| MP027081 | 21.00 | 32.97 | 15.00 | 27.12 | 75.00 | 128.45 | < .3 | 192.95 | 21.00 | 34.96 | < .5 | 0.27 | < 3 | 0.36 | < 3 | 0.65 | | |
| MP027082 | 12.00 | 18.71 | 13.00 | 24.40 | 62.00 | 119.39 | < .3 | 163.59 | 18.00 | 28.84 | < .5 | 0.23 | < 3 | 0.56 | < 3 | 0.55 | | |
| MP027083 | 15.00 | 27.58 | 15.00 | 33.49 | 64.00 | 133.74 | 0.40 | 353.32 | 19.00 | 39.57 | < .5 | 0.28 | < 3 | 0.83 | < 3 | 0.63 | | |
| MP027084 | 15.00 | 67.03 | 28.00 | 133.30 | 96.00 | 432.78 | 0.40 | 1060.49 | 29.00 | 118.31 | < .5 | 0.83 | < 3 | 2.05 | < 3 | 3.28 | | |
| MP027085 | 13.00 | 54.02 | 23.00 | 107.52 | 75.00 | 359.81 | 0.30 | 435.65 | 49.00 | 185.23 | < .5 | 0.55 | < 3 | 1.74 | < 3 | 2.71 | | |
| MP027086 | 11.00 | 34.59 | 18.00 | 71.57 | 74.00 | 276.22 | < .3 | 264.14 | 28.00 | 80.09 | < .5 | 0.37 | < 3 | 1.32 | < 3 | 1.74 | | |
| MP027087 | 9.00 | 16.42 | 16.00 | 26.70 | 94.00 | 186.08 | 0.50 | 336.00 | 22.00 | 34.56 | < .5 | 0.21 | < 3 | 0.58 | < 3 | 0.61 | | |
| MP027088 | 5.00 | 13.55 | 19.00 | 43.02 | 43.00 | 114.07 | 0.50 | 374.66 | 15.00 | 31.98 | < .5 | 0.32 | < 3 | 0.59 | < 3 | 0.94 | | |

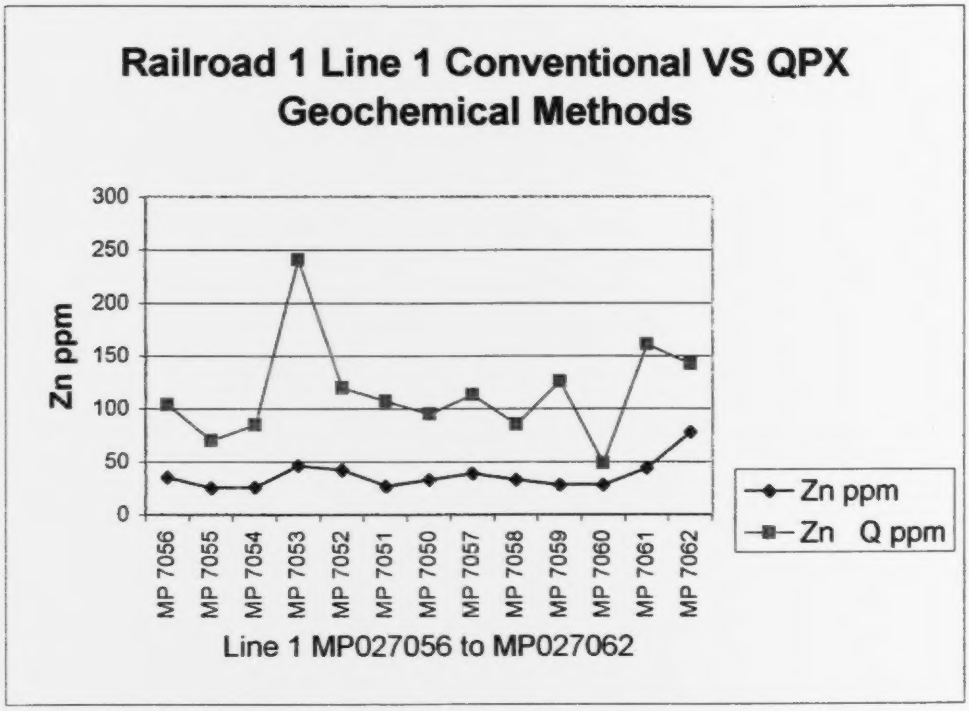
## Appendix 8b. Conventional versus QPX B-horizon soil geochemistry, Mount Fronsac massive sulphide deposit, Bathurst Mining Camp, 21 O/8, New Brunswick - (ICP-MS) and (ICP-ES)

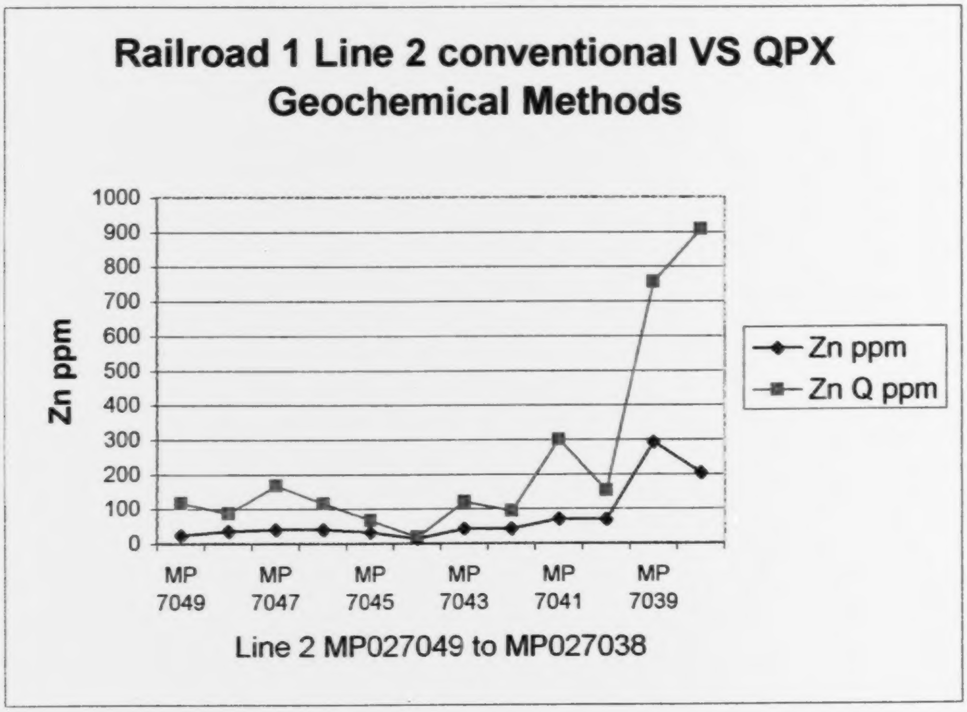
| SAMPLEID | Cu | Cu Q | Pb | Pb Q | Zn | Zn Q | Ag | Ag Q | As | As Q | Cd | Cd Q | Sb | Sb Q | Bi | Bi Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 1.00 | 0.01 | 3.00 | 0.01 | 1.00 | 0.10 | 0.30 | 0.20 | 2.00 | 0.10 | 0.50 | 0.01 | 3.00 | 0.02 | 3.00 | 0.02 |
| Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| **Line 1** | | | | | | | | | | | | | | | | |
| MP 7102 | 3.00 | 7.86 | 15.00 | 46.38 | 18.00 | 45.50 | < .3 | 93.00 | 6.00 | 20.80 | < .5 | 0.09 | < 3 | 0.83 | < 3 | 0.62 |
| MP 7103 | 5.00 | 11.52 | 33.00 | 77.73 | 48.00 | 119.51 | 0.30 | 335.36 | 13.00 | 36.24 | < .5 | 0.54 | 4.00 | 1.39 | < 3 | 0.91 |
| MP 7104 | 6.00 | 19.07 | 49.00 | 140.42 | 43.00 | 129.25 | 0.80 | 1037.76 | 23.00 | 68.50 | < .5 | 0.40 | < 3 | 2.50 | < 3 | 1.31 |
| MP 7105 | 8.00 | 32.65 | 80.00 | 386.58 | 38.00 | 187.96 | 0.40 | 535.76 | 70.00 | 340.10 | < .5 | 0.30 | 4.00 | 7.58 | 4.00 | 4.50 |
| MP 7106 | 4.00 | 11.43 | 10.00 | 34.48 | 23.00 | 98.55 | < .3 | 166.92 | < 2 | 17.01 | < .5 | 0.42 | < 3 | 2.34 | < 3 | 1.03 |
| MP 7107 | 9.00 | 20.72 | 35.00 | 93.75 | 63.00 | 133.50 | < .3 | 83.00 | 15.00 | 36.60 | < .5 | 0.20 | 3.00 | 1.47 | < 3 | 0.76 |
| MP 7108 | 4.00 | 3.01 | 11.00 | 12.11 | 9.00 | 14.10 | < .3 | 24.00 | 7.00 | 10.00 | < .5 | 0.08 | < 3 | 0.63 | < 3 | 0.41 |
| MP 7109 | 4.00 | 14.78 | 15.00 | 64.50 | 36.00 | 126.39 | 0.30 | 726.08 | 2.00 | 8.22 | < .5 | 0.57 | < 3 | 1.81 | < 3 | 0.57 |
| MP 7110 | 12.00 | 43.71 | 58.00 | 206.49 | 23.00 | 106.04 | < .3 | 261.80 | 44.00 | 167.20 | 0.50 | 0.40 | < 3 | 2.18 | < 3 | 4.86 |
| MP 7111 | 6.00 | 4.92 | 13.00 | 14.03 | 9.00 | 14.20 | < .3 | 104.00 | 5.00 | 6.60 | < .5 | 0.12 | < 3 | 0.58 | < 3 | 0.42 |
| MP 7112 | 2.00 | 9.00 | 13.00 | 33.57 | 15.00 | 67.57 | < .3 | 506.01 | < 2 | 15.76 | < .5 | 0.36 | < 3 | 2.39 | < 3 | 0.58 |
| MP 7113 | 3.00 | 2.65 | 10.00 | 12.08 | 8.00 | 15.70 | < .3 | 12.00 | 7.00 | 10.50 | < .5 | 0.04 | < 3 | 0.58 | < 3 | 0.56 |
| MP 7114 | 14.00 | 49.35 | 27.00 | 114.90 | 46.00 | 222.40 | < .3 | 148.01 | 32.00 | 123.86 | < .5 | 0.47 | 4.00 | 3.08 | < 3 | 5.10 |
| MP 7115 | 7.00 | 31.05 | 22.00 | 83.63 | 26.00 | 120.69 | 0.30 | 524.82 | 16.00 | 71.90 | < .5 | 0.72 | < 3 | 1.90 | < 3 | 4.95 |
| MP 7116 | 5.00 | 16.20 | 19.00 | 61.38 | 27.00 | 113.17 | < .3 | 124.14 | 12.00 | 37.82 | < .5 | 0.35 | < 3 | 1.62 | < 3 | 2.05 |
| **Line 2** | | | | | | | | | | | | | | | | |
| MP 7130 | 4.00 | 15.83 | 40.00 | 145.87 | 33.00 | 162.88 | < .3 | 164.16 | 17.00 | 68.23 | < .5 | 0.33 | < 3 | 1.80 | < 3 | 2.59 |
| MP 7129 | 4.00 | 7.46 | 30.00 | 69.66 | 19.00 | 76.64 | < .3 | 190.40 | 9.00 | 25.28 | < .5 | 0.19 | < 3 | 1.09 | < 3 | 0.93 |
| MP 7128 | 2.00 | 1.87 | 21.00 | 27.09 | 7.00 | 38.50 | < .3 | 48.00 | 2.00 | 1.90 | < .5 | 0.08 | < 3 | 0.33 | < 3 | 0.09 |
| MP 7127 | 8.00 | 44.22 | 134.00 | 249.47 | 43.00 | 220.80 | 0.30 | 142.00 | 7.00 | 33.30 | < .5 | 0.08 | < 3 | 0.85 | < 3 | 2.69 |
| MP 7126 | 7.00 | 27.09 | 80.00 | 268.11 | 43.00 | 334.37 | 0.50 | 473.44 | 7.00 | 22.33 | < .5 | 0.16 | < 3 | 1.64 | < 3 | 3.12 |
| MP 7125 | 4.00 | 15.56 | 31.00 | 104.06 | 25.00 | 132.86 | 0.50 | 445.10 | 10.00 | 30.12 | < .5 | 0.16 | < 3 | 1.37 | < 3 | 5.40 |
| MP 7124 | 2.00 | 2.36 | 9.00 | 10.74 | 15.00 | 26.80 | 0.30 | 99.00 | < 2 | 1.70 | < .5 | 0.08 | < 3 | 0.32 | < 3 | 0.25 |
| MP 7123 | 8.00 | 13.57 | 80.00 | 155.47 | 52.00 | 224.46 | 0.40 | 188.50 | 8.00 | 21.75 | < .5 | 0.20 | < 3 | 2.09 | < 3 | 5.05 |
| MP 7122 | 3.00 | 17.40 | 43.00 | 169.07 | 31.00 | 165.34 | < .3 | 211.17 | 6.00 | 17.84 | < .5 | 0.13 | < 3 | 0.97 | < 3 | 2.68 |
| MP 7121 | 6.00 | 16.96 | 33.00 | 84.60 | 54.00 | 215.00 | < .3 | 156.00 | 5.00 | 14.40 | < .5 | 0.28 | < 3 | 1.06 | < 3 | 2.82 |
| MP 7120 | 3.00 | 2.23 | 30.00 | 23.68 | 26.00 | 48.80 | < .3 | 15.00 | 4.00 | 4.20 | < .5 | 0.04 | < 3 | 0.32 | < 3 | 0.89 |
| MP 7119 | 6.00 | 20.42 | 59.00 | 171.33 | 44.00 | 243.75 | < .3 | 128.29 | 8.00 | 29.71 | < .5 | 0.20 | < 3 | 1.72 | < 3 | 5.37 |
| MP 7118 | 3.00 | 9.65 | 43.00 | 61.72 | 30.00 | 105.80 | < .3 | 47.00 | 5.00 | 12.70 | < .5 | 0.04 | < 3 | 0.29 | < 3 | 2.26 |
| MP 7117 | 2.00 | 7.81 | 17.00 | 38.76 | 13.00 | 52.40 | < .3 | 64.00 | 4.00 | 12.20 | < .5 | 0.05 | < 3 | 0.53 | < 3 | 0.64 |
| **Line 3** | | | | | | | | | | | | | | | | |
| MP 7141 | 12.00 | 27.91 | 30.00 | 76.46 | 109.00 | 305.16 | < .3 | 142.98 | 15.00 | 41.40 | < .5 | 0.38 | < 3 | 1.22 | < 3 | 2.65 |
| MP 7140 | 11.00 | 26.99 | 48.00 | 157.18 | 115.00 | 388.61 | < .3 | 201.48 | 20.00 | 51.89 | < .5 | 0.41 | < 3 | 1.79 | < 3 | 2.88 |
| MP 7139 | 9.00 | 28.59 | 25.00 | 77.34 | 72.00 | 274.18 | < .3 | 134.37 | 16.00 | 47.17 | < .5 | 0.51 | 3.00 | 1.89 | < 3 | 1.95 |
| MP 7138 | 10.00 | 13.57 | 24.00 | 31.87 | 113.00 | 157.40 | < .3 | 36.00 | 11.00 | 17.50 | < .5 | 0.18 | < 3 | 0.60 | < 3 | 1.47 |
| MP 7137 | 6.00 | 16.31 | 19.00 | 98.67 | 49.00 | 220.32 | < .3 | 91.01 | 17.00 | 71.29 | < .5 | 0.61 | < 3 | 2.01 | < 3 | 1.31 |
| MP 7136 | 7.00 | 22.72 | 23.00 | 71.19 | 60.00 | 197.60 | < .3 | 158.36 | 9.00 | 36.95 | < .5 | 0.34 | < 3 | 1.26 | < 3 | 1.31 |
| MP 7135 | 7.00 | 19.74 | 24.00 | 68.24 | 77.00 | 231.69 | < .3 | 92.50 | 7.00 | 39.03 | < .5 | 0.27 | < 3 | 1.35 | < 3 | 2.28 |
| MP 7134 | 5.00 | 16.39 | 27.00 | 78.76 | 35.00 | 116.06 | < .3 | 369.96 | 9.00 | 32.69 | < .5 | 0.33 | < 3 | 1.24 | < 3 | 0.61 |
| MP 7133 | 5.00 | 15.64 | 17.00 | 70.22 | 38.00 | 170.35 | < .3 | 130.04 | 9.00 | 47.46 | < .5 | 0.49 | < 3 | 1.53 | < 3 | 2.00 |
| MP 7132 | 7.00 | 35.49 | 23.00 | 106.07 | 37.00 | 213.18 | < .3 | 157.08 | 9.00 | 59.84 | < .5 | 0.45 | < 3 | 1.87 | < 3 | 1.35 |
| MP 7131 | 4.00 | 22.44 | 17.00 | 69.53 | 20.00 | 120.74 | < .3 | 318.63 | 6.00 | 41.25 | < .5 | 0.27 | < 3 | 1.74 | < 3 | 1.15 |

## Appendix 8c. Conventional versus QPX B-horizon soil geochemistry, Camel Back massive sulphide deposit, Bathurst Mining Camp, 21 O/9, New Brunswick - (ICP-MS) and (ICP-ES)

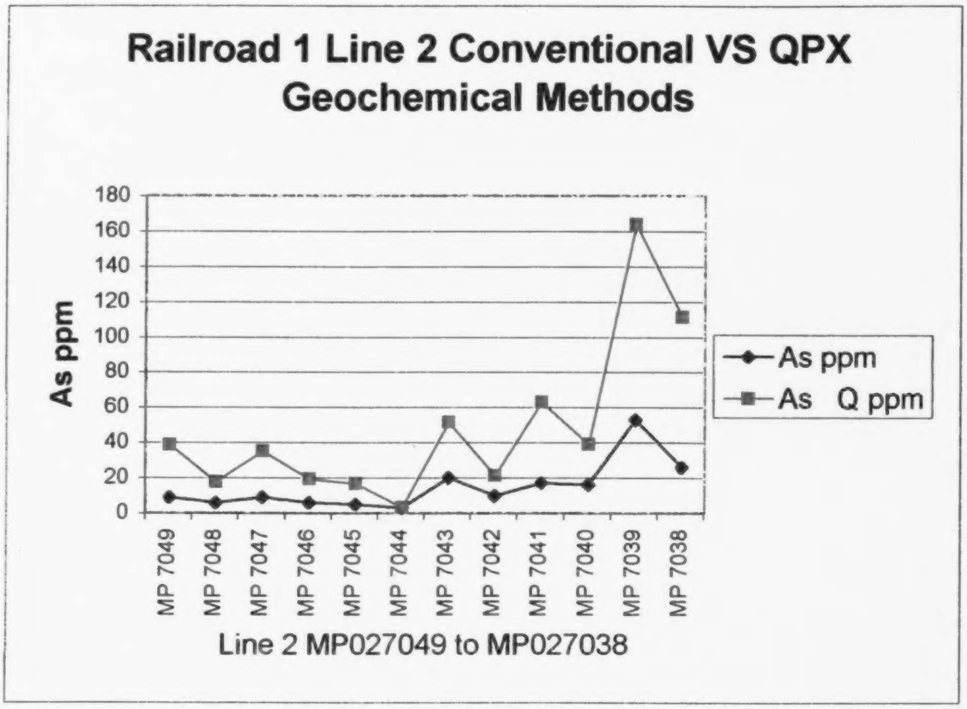
| SAMPLEID | Cu | Cu Q | Pb | Pb Q | Zn | Zn Q | Ag | Ag Q | As | As Q | Cd | Cd Q | Sb | Sb Q | Bi | Bi Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit | 1.00 | 0.01 | 3.00 | 0.01 | 1.00 | 0.10 | 0.30 | 2.00 | 2.00 | 0.10 | 0.50 | 0.01 | 3.00 | 0.02 | 3.00 | 0.02 |
| Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| **Line 1** | | | | | | | | | | | | | | | | |
| MP 7152 | 11.00 | 25.39 | 29.00 | 114.12 | 50.00 | 197.00 | 0.40 | 424.82 | 17.00 | 73.32 | < .5 | 0.27 | 4.00 | 2.33 | < 3 | 2.54 |
| MP 7151 | 8.00 | 23.77 | 20.00 | 74.94 | 85.00 | 295.43 | 0.40 | 867.95 | 13.00 | 36.42 | < .5 | 0.52 | < 3 | 1.72 | < 3 | 1.15 |
| MP 7150 | 4.00 | 14.65 | 23.00 | 81.58 | 44.00 | 188.28 | < .3 | 115.03 | 12.00 | 37.23 | < .5 | 0.21 | < 3 | 2.03 | < 3 | 1.63 |
| MP 7149 | 4.00 | 2.27 | 23.00 | 23.80 | 36.00 | 38.00 | < .3 | 23.00 | 7.00 | 10.30 | < .5 | 0.09 | < 3 | 0.32 | < 3 | 0.49 |
| MP 7148 | 12.00 | 29.64 | 38.00 | 118.92 | 59.00 | 189.52 | < .3 | 189.75 | 18.00 | 51.83 | < .5 | 0.16 | < 3 | 2.06 | < 3 | 1.67 |
| MP 7147 | 22.00 | 62.76 | 55.00 | 217.86 | 111.00 | 409.89 | < .3 | 445.74 | 34.00 | 114.34 | < .5 | 1.55 | < 3 | 2.65 | < 3 | 3.10 |
| MP 7146 | 14.00 | 31.78 | 28.00 | 83.00 | 139.00 | 357.25 | 0.50 | 564.56 | 17.00 | 45.28 | < .5 | 0.53 | < 3 | 1.89 | < 3 | 0.81 |
| MP 7145 | 5.00 | 13.09 | 20.00 | 59.08 | 44.00 | 124.99 | < .3 | 162.69 | 15.00 | 33.73 | < .5 | 0.16 | < 3 | 1.11 | < 3 | 0.89 |
| MP 7144 | 8.00 | 23.30 | 25.00 | 89.68 | 60.00 | 248.05 | < .3 | 245.74 | 16.00 | 47.99 | < .5 | 0.46 | < 3 | 1.76 | < 3 | 1.68 |
| MP 7143 | 13.00 | 39.80 | 25.00 | 80.16 | 69.00 | 252.22 | < .3 | 194.02 | 20.00 | 48.96 | < .5 | 0.43 | < 3 | 1.74 | < 3 | 3.02 |
| MP 7142 | 9.00 | 21.81 | 34.00 | 75.06 | 71.00 | 215.89 | < .3 | 240.62 | 18.00 | 45.90 | < .5 | 0.29 | < 3 | 1.60 | < 3 | 1.27 |
| **Line 2** | | | | | | | | | | | | | | | | |
| MP 7153 | 6.00 | 18.49 | 20.00 | 94.40 | 41.00 | 191.28 | 0.30 | 206.69 | 12.00 | 63.51 | < .5 | 0.53 | 3.00 | 2.41 | < 3 | 2.29 |
| MP 7154 | 11.00 | 29.23 | 24.00 | 82.67 | 89.00 | 293.65 | 0.70 | 742.23 | 4.00 | 41.29 | 0.50 | 0.70 | < 3 | 1.65 | < 3 | 1.86 |
| MP 7155 | 9.00 | 25.36 | 23.00 | 91.31 | 56.00 | 193.93 | 0.60 | 649.53 | 6.00 | 45.16 | < .5 | 0.34 | 4.00 | 2.04 | < 3 | 1.76 |
| MP 7156 | 8.00 | 24.32 | 22.00 | 82.36 | 48.00 | 181.10 | 0.40 | 408.42 | 8.00 | 39.23 | < .5 | 0.73 | 3.00 | 1.72 | < 3 | 1.32 |
| MP 7157 | 7.00 | 24.96 | 27.00 | 112.18 | 30.00 | 129.84 | 0.40 | 350.57 | 8.00 | 49.34 | < .5 | 0.32 | < 3 | 1.46 | < 3 | 2.63 |
| MP 7158 | 12.00 | 41.00 | 38.00 | 136.93 | 70.00 | 276.75 | 0.50 | 820.59 | 13.00 | 66.93 | < .5 | 0.32 | 3.00 | 1.80 | < 3 | 3.12 |
| MP 7159 | 13.00 | 45.16 | 46.00 | 163.71 | 58.00 | 232.62 | 0.40 | 359.50 | 12.00 | 66.16 | < .5 | 0.39 | 3.00 | 1.96 | < 3 | 3.38 |
| MP 7160 | 14.00 | 26.22 | 48.00 | 99.00 | 83.00 | 179.61 | 0.30 | 188.79 | 20.00 | 42.95 | < .5 | 0.31 | < 3 | 1.28 | < 3 | 1.58 |
| MP 7161 | 12.00 | 36.46 | 56.00 | 210.33 | 64.00 | 257.44 | 0.50 | 389.38 | 8.00 | 42.48 | < .5 | 0.35 | < 3 | 1.42 | < 3 | 3.54 |
| MP 7162 | 8.00 | 29.52 | 43.00 | 172.31 | 52.00 | 209.46 | 0.30 | 693.12 | 8.00 | 47.42 | < .5 | 0.43 | < 3 | 1.64 | < 3 | 2.34 |
| MP 7163 | 6.00 | 21.13 | 25.00 | 95.99 | 54.00 | 218.41 | 0.50 | 449.67 | 12.00 | 56.46 | < .5 | 0.44 | < 3 | 2.40 | < 3 | 1.99 |
| **Line 3** | | | | | | | | | | | | | | | | |
| MP 7170 | 7.00 | 23.78 | 27.00 | 101.53 | 64.00 | 249.80 | 0.40 | 350.47 | 15.00 | 57.38 | < .5 | 0.62 | < 3 | 2.61 | < 3 | 2.06 |
| MP 7169 | 5.00 | 13.31 | 17.00 | 59.49 | 50.00 | 171.91 | 0.40 | 343.82 | 8.00 | 31.42 | < .5 | 0.41 | < 3 | 1.36 | < 3 | 1.27 |
| MP 7168 | 14.00 | 39.20 | 21.00 | 71.70 | 124.00 | 406.05 | < .3 | 508.84 | < 2 | 14.83 | 5.10 | 7.47 | < 3 | 2.58 | < 3 | 0.41 |
| MP 7167 | 11.00 | 35.41 | 27.00 | 118.17 | 43.00 | 176.28 | < .3 | 189.65 | 17.00 | 64.36 | 0.50 | 0.50 | < 3 | 2.61 | < 3 | 2.61 |
| MP 7166 | 8.00 | 26.21 | 20.00 | 86.77 | 51.00 | 191.02 | 0.40 | 172.21 | 12.00 | 49.11 | < .5 | 0.32 | 4.00 | 2.42 | < 3 | 1.85 |
| MP 7165 | 15.00 | 50.15 | 22.00 | 112.85 | 90.00 | 391.69 | 0.40 | 402.21 | 16.00 | 71.80 | 0.50 | 0.49 | < 3 | 3.04 | < 3 | 2.97 |
| MP 7164 | 19.00 | 63.76 | 33.00 | 131.58 | 66.00 | 265.06 | 0.30 | 544.01 | 35.00 | 140.78 | < .5 | 0.40 | < 3 | 1.32 | < 3 | 12.92 |
| MP 7171 | 13.00 | 46.63 | 55.00 | 202.07 | 79.00 | 329.17 | 0.50 | 525.71 | 19.00 | 66.31 | < .5 | 0.38 | 3.00 | 3.23 | < 3 | 2.68 |
| MP 7172 | 25.00 | 85.47 | 70.00 | 240.92 | 96.00 | 317.64 | 0.30 | 325.12 | 31.00 | 110.17 | 0.70 | 0.63 | 3.00 | 2.36 | 4.00 | 5.36 |
| MP 7173 | 9.00 | 22.23 | 21.00 | 56.86 | 86.00 | 194.64 | 0.70 | 402.70 | 17.00 | 30.52 | 0.60 | 0.18 | 5.00 | 1.28 | < 3 | 1.37 |
| MP 7174 | 7.00 | 20.90 | 34.00 | 123.43 | 50.00 | 193.07 | 0.50 | 344.77 | 15.00 | 40.77 | < .5 | 0.33 | 3.00 | 2.64 | < 3 | 2.22 |

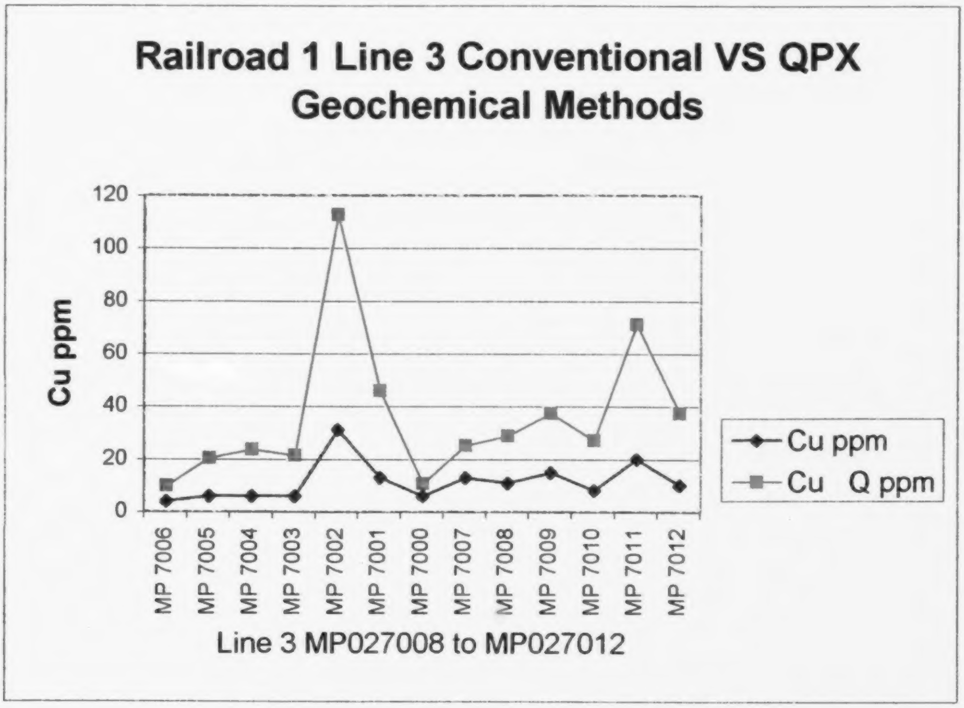
Appendix 8d. Profile plots of conventional versus QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS) and (ICP-ES)



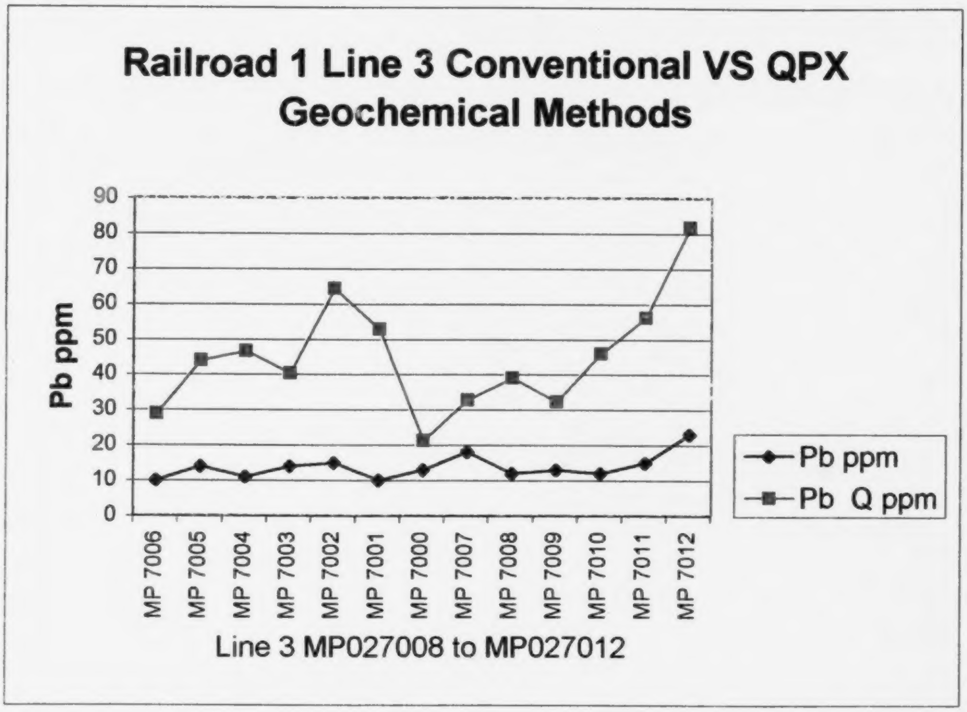


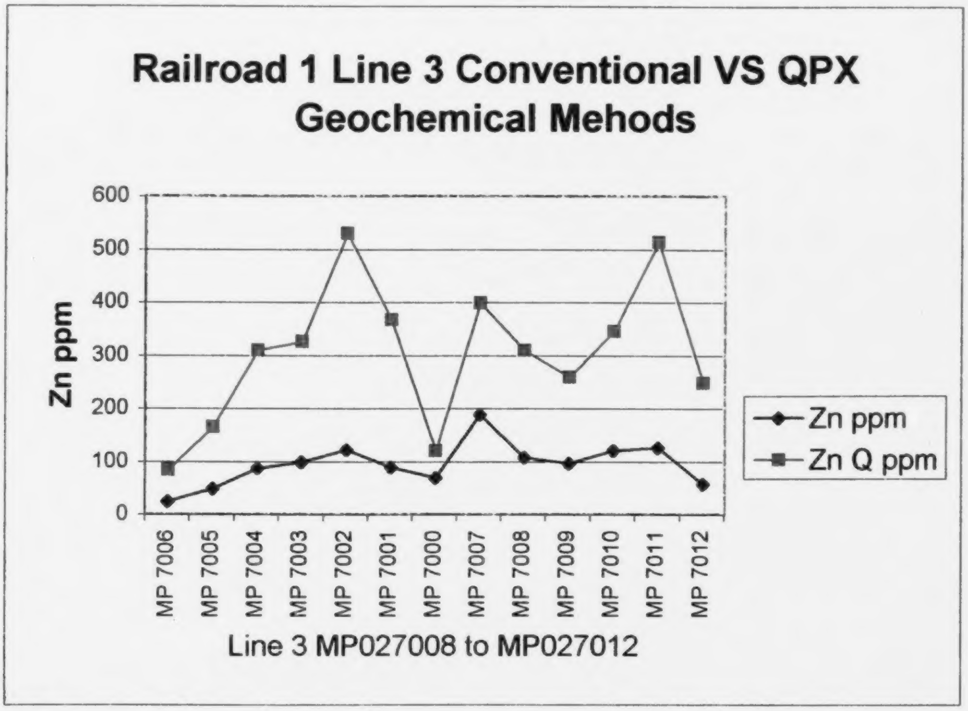
Appendix 8d. Profile plots of conventional versus QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS) and (ICP-ES)



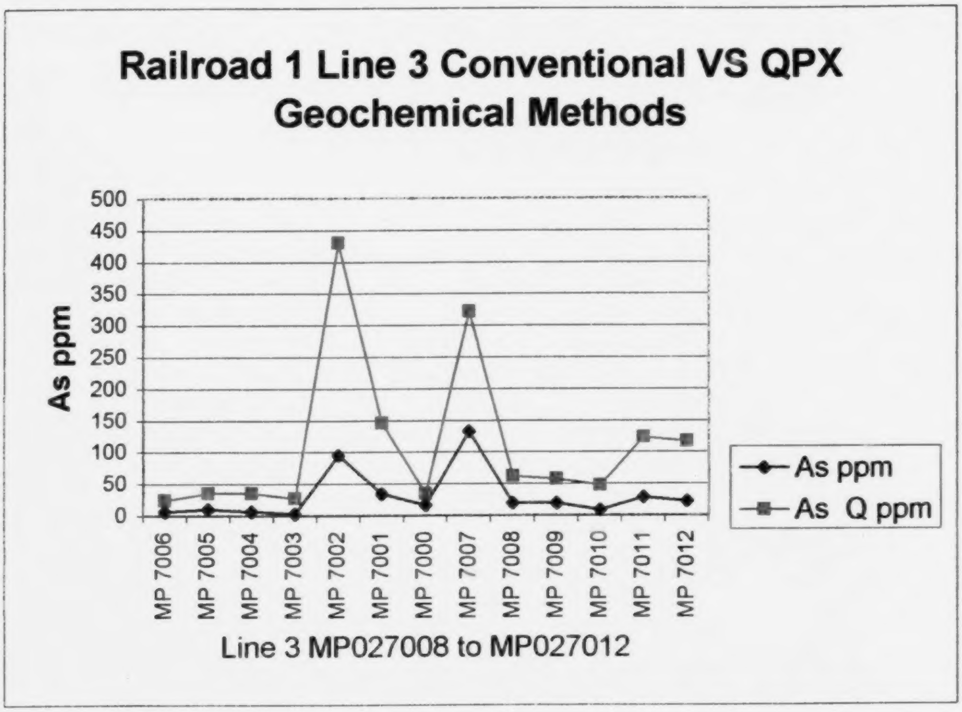


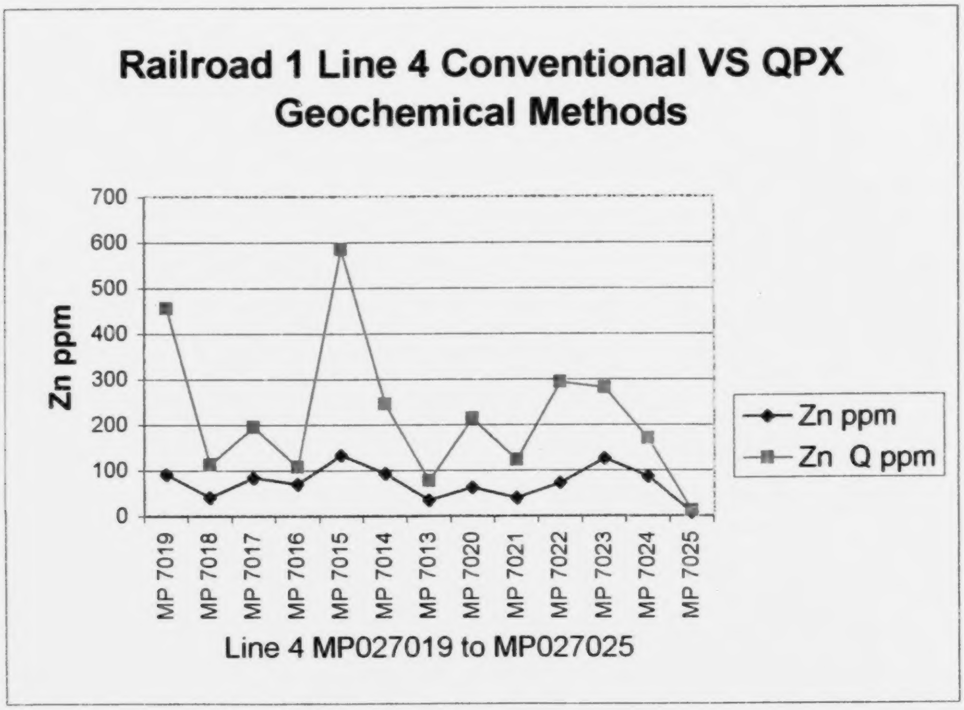
Appendix 8d. Profile plots of conventional versus QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS) and (ICP-ES)


Railroad 1 Line 3 Conventional VS QPX Geochemical Methods

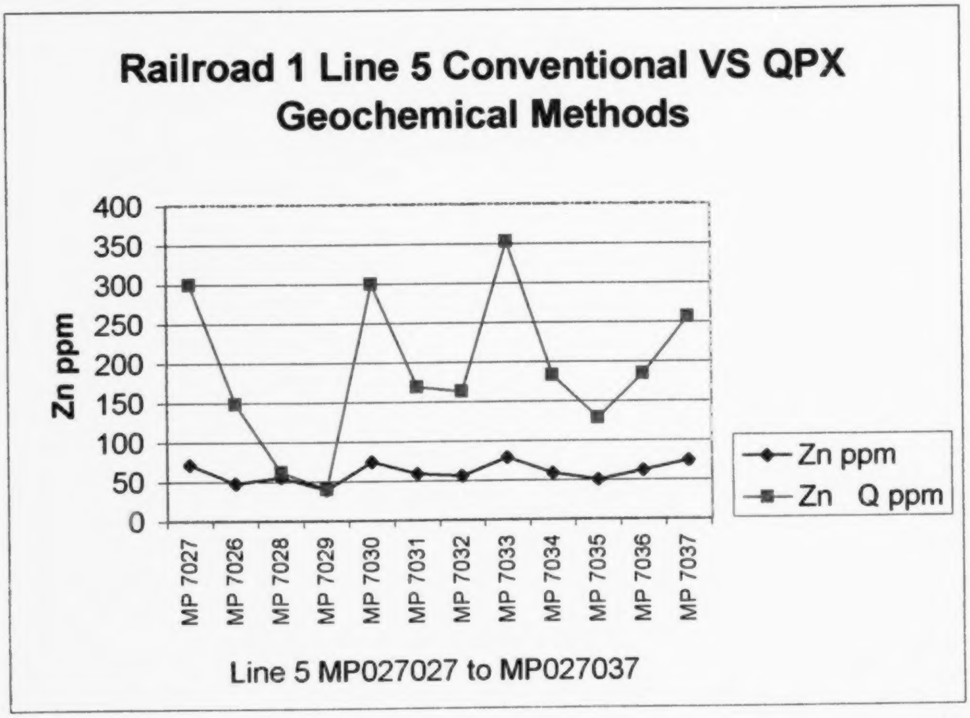

Railroad 1 Line 3 Conventional VS QPX Geochemical Mehods

Appendix 8d. Profile plots of conventional versus QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS) and (ICP-ES)

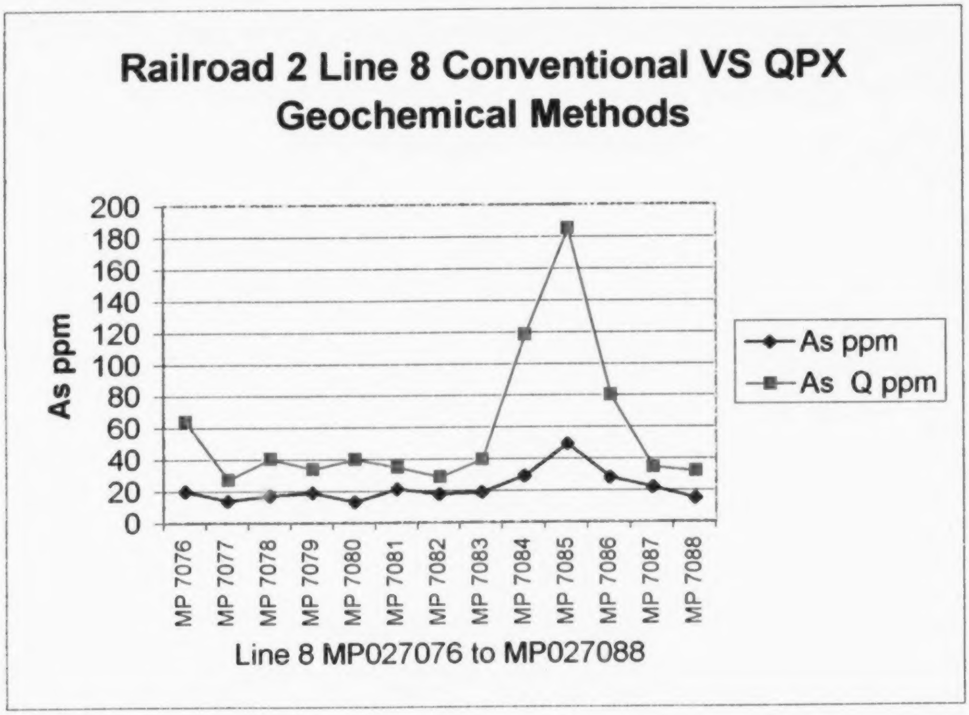


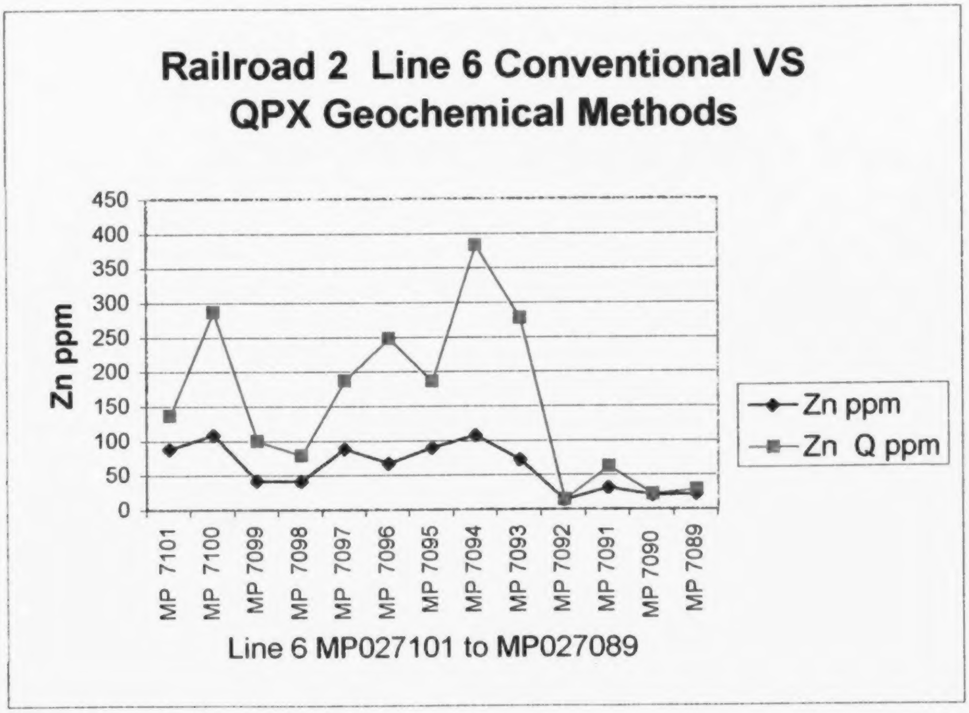


Appendix 8d. Profile plots of conventional versus QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS) and (ICP-ES)

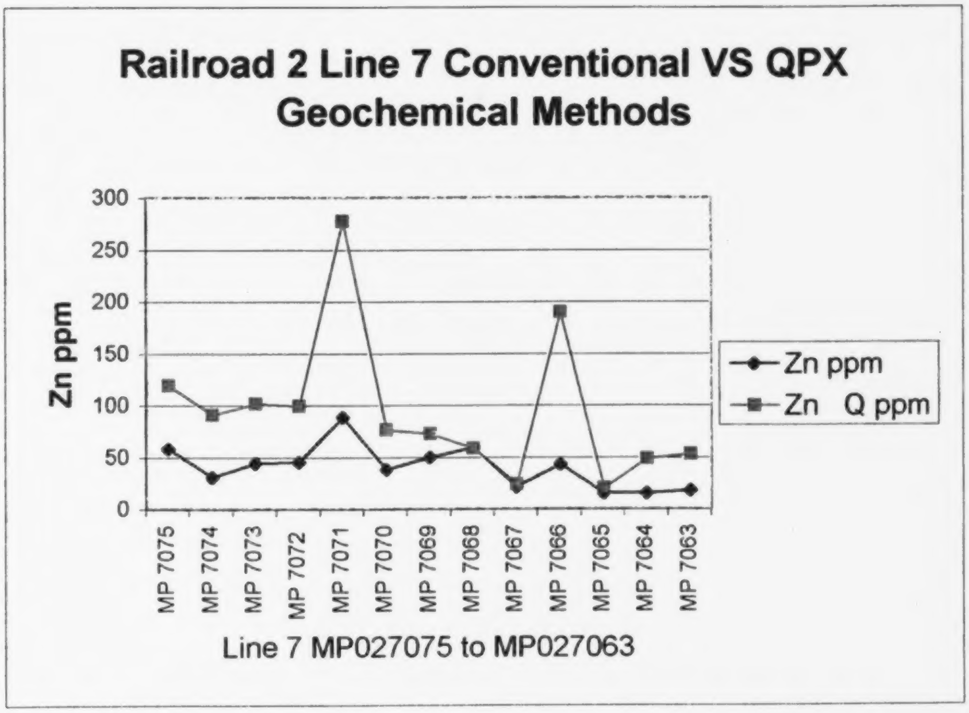


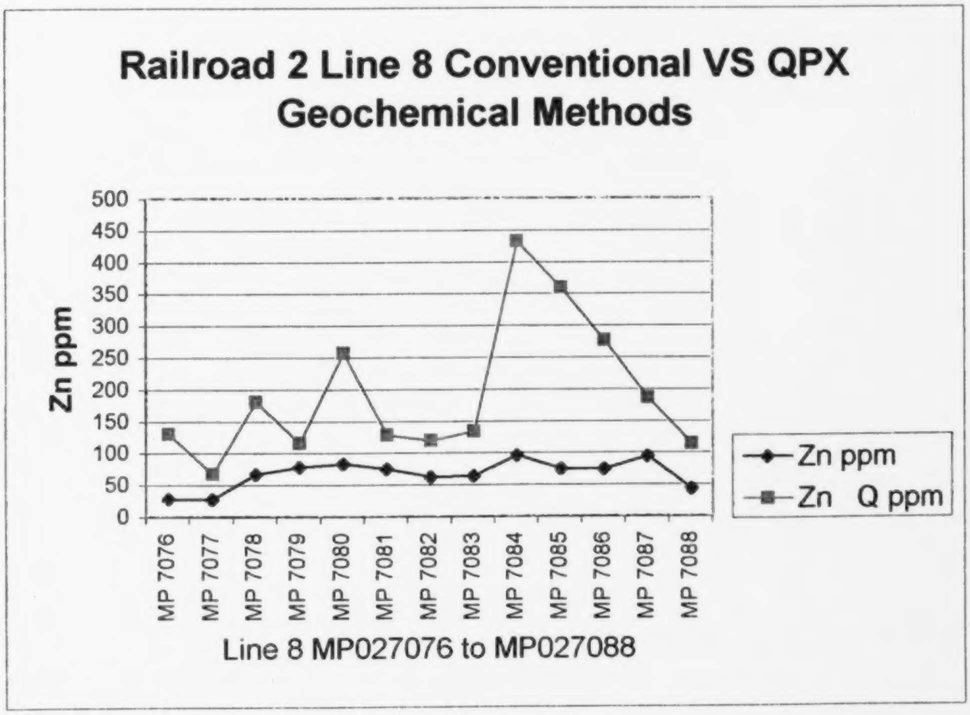
Appendix 8d. Profile plots of conventional versus QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS) and (ICP-ES)



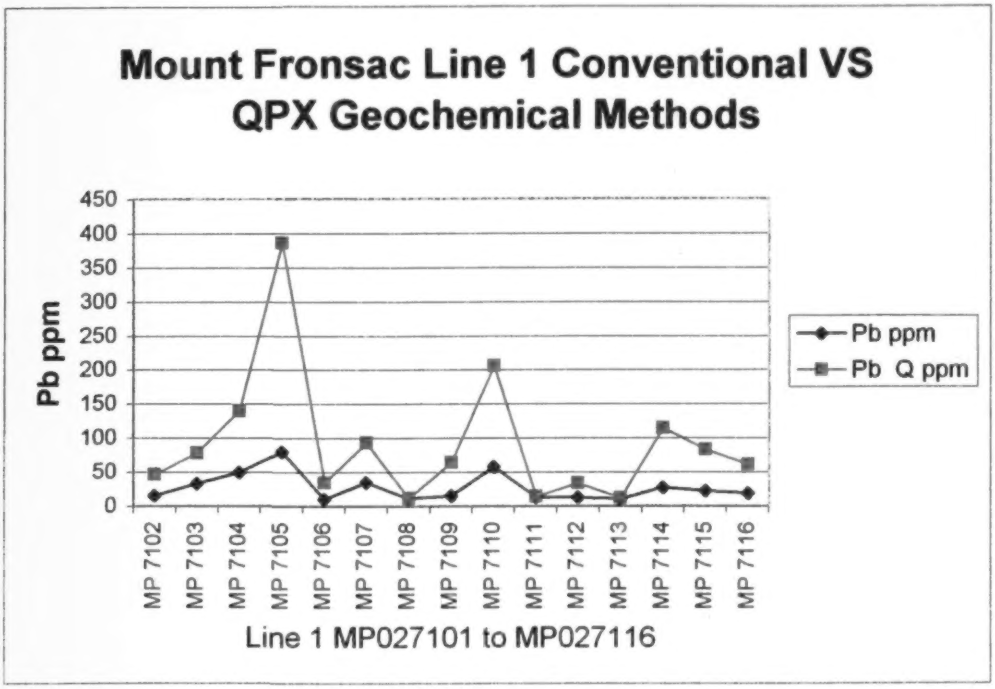


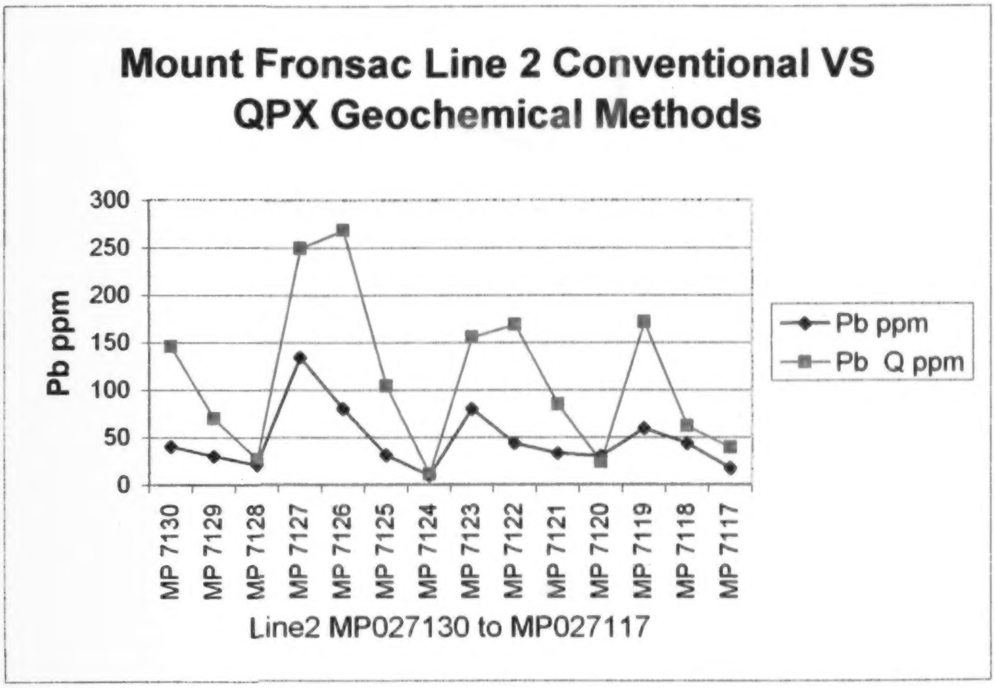
Appendix 8d. Profile plots of conventional versus QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS) and (ICP-ES)



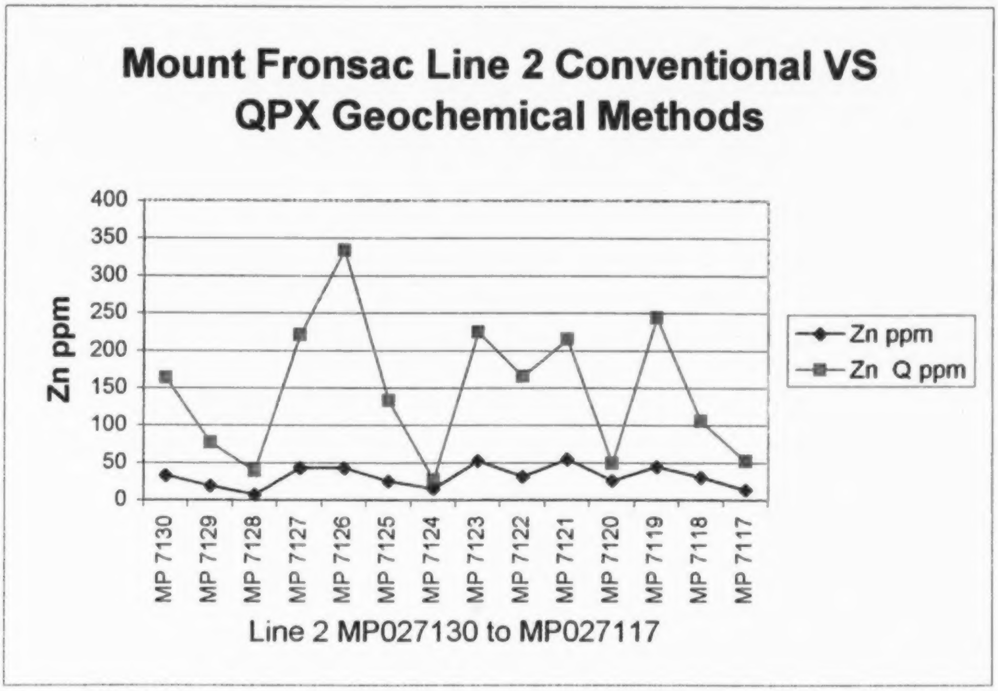


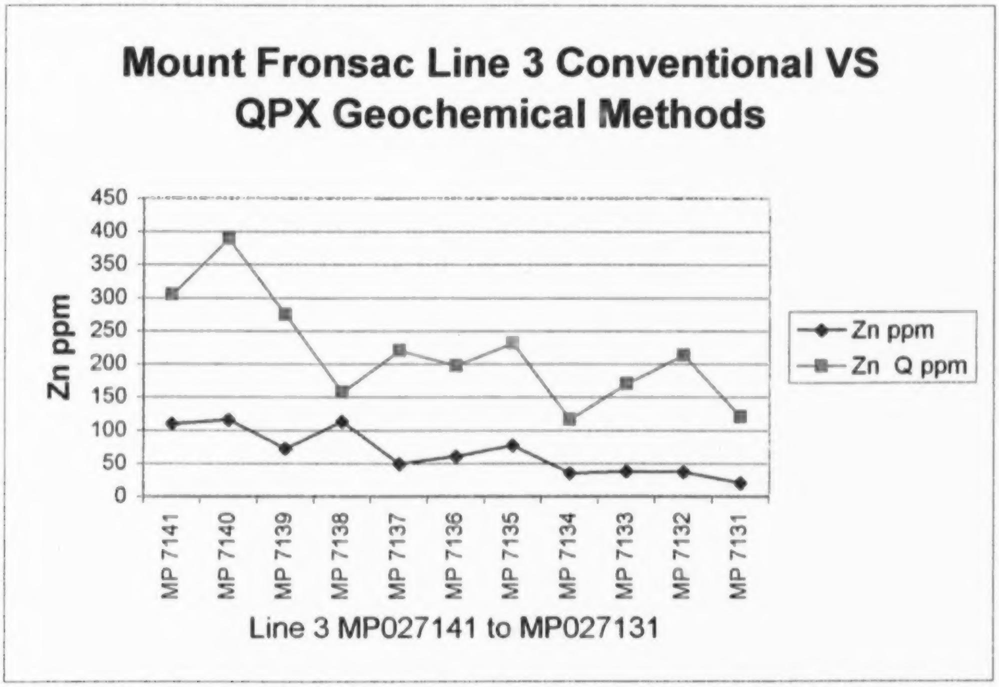
Appendix 8e. Profile plots of conventional versus QPX B-horizon soil geochemistry, Mount Fronsac massive sulphide deposit, Bathurst Mining Camp, 21 O/8, New Brunswick - (ICP-MS) and (ICP-MS)



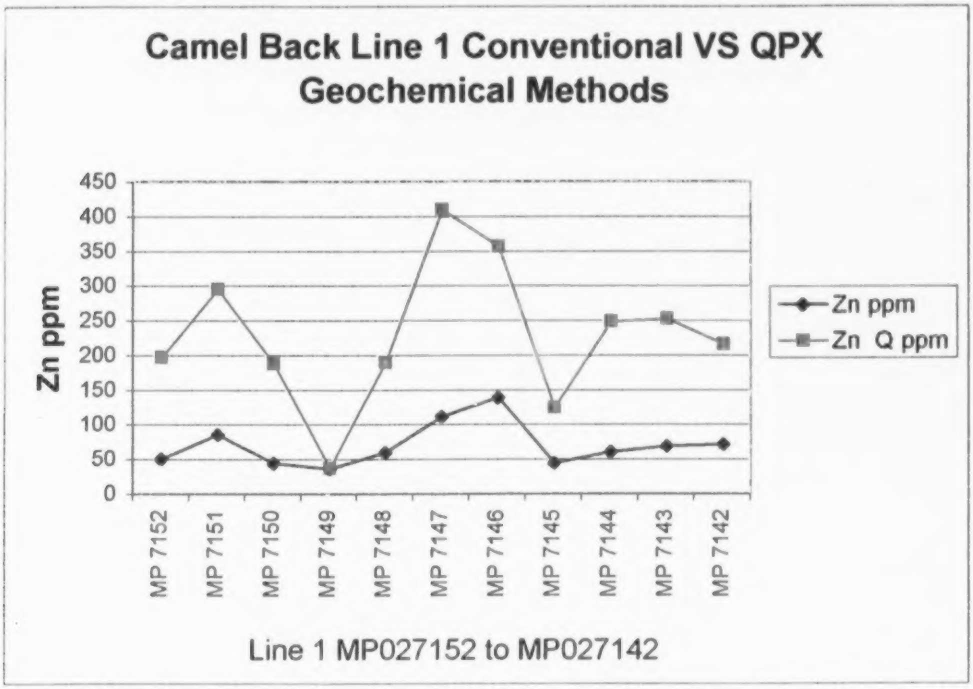


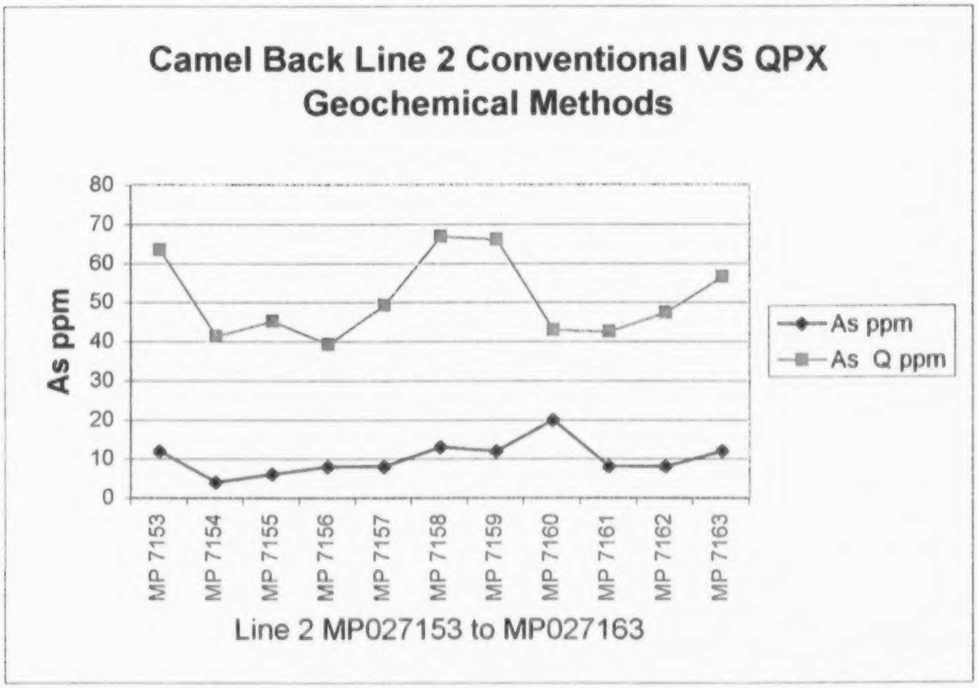
Appendix 8e. Profile plots of conventional versus QPX B-horizon soil geochemistry, Mount Fronsac massive sulphide deposit, Bathurst Mining Camp, 21 O/8, New Brunswick - (ICP-MS) and (ICP-MS)



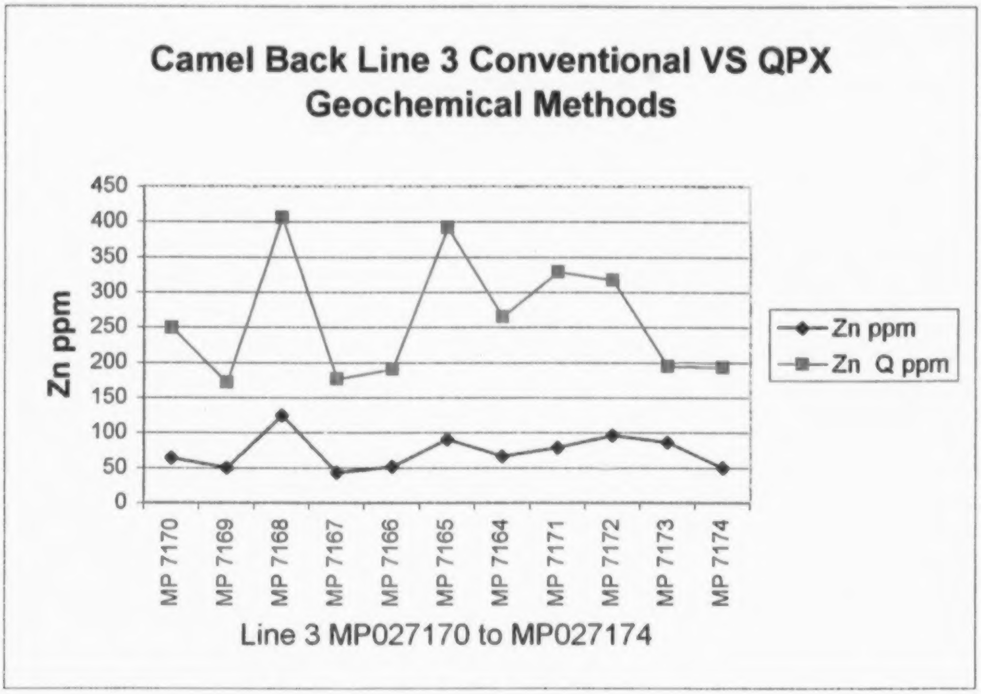


Appendix 8f. Profile plots of conventional versus QPX B-horizon soil geochemistry, Camel Back massive sulphide deposit, Bathurst Mining Camp, 21 O/9, New Brunswick - (ICP-MS) and (ICP ES)





Appendix 8f. Profile plots of conventional versus QPX B-horizon soil geochemistry, Camel Back massive sulphide deposit, Bathurst Mining Camp, 21 O/9, New Brunswick - (ICP-MS) and (ICP ES)



## Appendix 9. Quality control data, QPX and QPVX project, Bathurst Mining Camp, New Brunswick - (ICP-MS)

| SAMPLEID | Area | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppb | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppb | Th ppm | Sr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MP015001 | Transect 5000 | 1.06 | 10.95 | 22.29 | 46.40 | 23.00 | 12.20 | 5.50 | 213.00 | 4.03 | 12.20 | 0.80 | 6.80 | 4.60 | 5.60 |
| MP015001 FD | Transect 5000 | 1.21 | 9.27 | 18.27 | 41.60 | 39.00 | 9.90 | 4.50 | 212.00 | 4.42 | 13.00 | 0.70 | 4.70 | 4.30 | 5.10 |
| MP015015 | Transect 5000 | 1.15 | 8.03 | 21.46 | 26.50 | 33.00 | 7.30 | 4.20 | 152.00 | 4.16 | 10.70 | 0.80 | 0.70 | 5.20 | 3.80 |
| MP015015 FD | Transect 5000 | 1.26 | 6.14 | 18.33 | 21.50 | 30.00 | 6.20 | 3.50 | 214.00 | 4.18 | 10.30 | 0.70 | 1.40 | 4.30 | 3.60 |
| MP015029 | Transect 5000 | 1.40 | 6.26 | 32.64 | 62.80 | 56.00 | 7.80 | 4.70 | 185.00 | 4.34 | 34.70 | 1.10 | 0.60 | 5.90 | 8.30 |
| MP015029 FD | Transect 5000 | 1.48 | 6.81 | 33.04 | 66.20 | 60.00 | 8.30 | 5.10 | 183.00 | 3.93 | 38.60 | 1.20 | 2.20 | 6.50 | 8.50 |
| MP015045 | Transect 5000 | 1.36 | 13.11 | 23.96 | 38.50 | 130.00 | 13.50 | 6.60 | 195.00 | 3.89 | 38.00 | 0.80 | 2.20 | 4.50 | 4.50 |
| MP015045 FD | Transect 5000 | 1.69 | 11.08 | 27.12 | 37.00 | 92.00 | 11.20 | 4.80 | 163.00 | 4.21 | 40.80 | 0.80 | 1.60 | 4.70 | 4.80 |
| MP015073 | Transect 5000 | 0.52 | 6.80 | 11.69 | 81.70 | 209.00 | 10.70 | 6.70 | 271.00 | 2.97 | 4.50 | 0.90 | 2.10 | 5.20 | 9.20 |
| MP015073 FD | Transect 5000 | 0.52 | 4.79 | 10.67 | 47.60 | 104.00 | 8.60 | 3.30 | 149.00 | 2.94 | 3.80 | 0.80 | 0.70 | 5.10 | 6.60 |
| MP015085 | Transect 5000 | 0.85 | 15.29 | 21.85 | 54.90 | 235.00 | 6.70 | 3.20 | 146.00 | 3.50 | 23.60 | 0.90 | 6.50 | 8.00 | 4.80 |
| MP015085 FD | Transect 5000 | 0.74 | 8.36 | 17.20 | 36.80 | 93.00 | 4.50 | 2.00 | 85.00 | 2.84 | 23.40 | 0.60 | 4.00 | 5.80 | 5.70 |
| MP015097 | Transect 5000 | 0.71 | 6.50 | 11.46 | 46.50 | 31.00 | 8.90 | 3.50 | 148.00 | 3.22 | 7.60 | 1.00 | 1.90 | 6.70 | 4.90 |
| MP015097 FD | Transect 5000 | 0.73 | 7.73 | 12.48 | 50.50 | 30.00 | 9.40 | 4.00 | 163.00 | 3.20 | 10.20 | 0.90 | 2.30 | 6.60 | 5.40 |
| RE MP015018 | Transect 5000 | 1.42 | 12.45 | 31.63 | 46.30 | 86.00 | 10.30 | 6.60 | 208.00 | 4.21 | 26.00 | 1.00 | 1.50 | 5.80 | 5.30 |
| MP015040 | Transect 5000 | 2.02 | 13.53 | 30.15 | 176.80 | 17.00 | 25.70 | 11.00 | 640.00 | 2.71 | 50.20 | 1.30 | 1.40 | 6.30 | 10.60 |
| RE MP015040 | Transect 5000 | 2.05 | 13.63 | 29.55 | 176.00 | 17.00 | 24.80 | 10.40 | 628.00 | 2.68 | 50.20 | 1.30 | 2.30 | 6.30 | 9.90 |
| RE MP015078 | Transect 5000 | 1.29 | 23.24 | 10.89 | 44.60 | 153.00 | 19.00 | 9.30 | 321.00 | 3.13 | 15.50 | 0.60 | 0.70 | 4.20 | 4.80 |
| MP015078 | Transect 5000 | 1.24 | 22.67 | 10.95 | 45.10 | 147.00 | 18.70 | 9.40 | 326.00 | 3.14 | 15.20 | 0.60 | 1.20 | 4.00 | 5.00 |
| MP015096 | Transect 5000 | 0.93 | 5.07 | 9.26 | 30.40 | 55.00 | 3.70 | 2.00 | 90.00 | 3.51 | 9.50 | 0.60 | 0.60 | 5.30 | 2.90 |
| RE MP015096 | Transect 5000 | 0.97 | 5.54 | 9.47 | 30.80 | 58.00 | 4.50 | 2.30 | 92.00 | 3.54 | 10.30 | 0.60 | 2.90 | 5.50 | 3.10 |
| MP015018 LD | Transect 5000 | 1.56 | 13.51 | 32.87 | 47.50 | 97.00 | 10.50 | 5.70 | 179.00 | 4.18 | 26.40 | 1.10 | 0.70 | 6.50 | 4.90 |
| MP015018 | Transect 5000 | 1.41 | 12.87 | 27.96 | 42.70 | 81.00 | 9.40 | 6.20 | 219.00 | 4.23 | 28.10 | 1.00 | 0.60 | 6.00 | 5.10 |
| MP015038 LD | Transect 5000 | 0.77 | 17.20 | 20.00 | 98.20 | 45.00 | 11.60 | 5.10 | 263.00 | 3.65 | 28.30 | 0.80 | 1.60 | 5.10 | 4.80 |
| MP015038 | Transect 5000 | 0.87 | 17.78 | 18.66 | 103.40 | 45.00 | 11.50 | 5.50 | 313.00 | 3.91 | 32.20 | 0.90 | 1.10 | 5.10 | 5.00 |
| MP015060 LD | Transect 5000 | 0.58 | 5.23 | 17.76 | 30.00 | 85.00 | 8.10 | 3.20 | 138.00 | 3.97 | 4.40 | 1.30 | < .2 | 6.20 | 6.00 |
| MP015060 | Transect 5000 | 0.58 | 4.94 | 16.95 | 28.90 | 77.00 | 9.00 | 3.10 | 138.00 | 4.04 | 4.50 | 1.40 | 0.40 | 6.40 | 5.90 |
| MP015081 LD | Transect 5000 | 0.72 | 7.89 | 11.76 | 61.70 | 57.00 | 15.70 | 5.10 | 193.00 | 2.70 | 8.20 | 0.60 | 0.80 | 4.20 | 7.90 |
| MP015081 | Transect 5000 | 0.76 | 8.75 | 11.92 | 65.70 | 49.00 | 16.60 | 5.20 | 206.00 | 2.87 | 9.20 | 0.70 | 0.90 | 4.50 | 8.60 |
| MP015097 LD | Transect 5000 | 0.76 | 6.79 | 11.96 | 49.80 | 33.00 | 8.10 | 3.30 | 143.00 | 3.26 | 7.60 | 0.90 | 0.30 | 6.20 | 4.70 |
| MP015097 | Transect 5000 | 0.71 | 6.50 | 11.46 | 46.50 | 31.00 | 8.90 | 3.50 | 148.00 | 3.22 | 7.60 | 1.00 | 1.90 | 6.70 | 4.90 |
| MP016018 FD | Transect 6000 | 0.90 | 5.82 | 12.37 | 25.80 | 89.00 | 4.90 | 2.50 | 134.00 | 4.16 | 21.50 | 0.50 | 1.00 | 3.20 | 3.40 |
| MP016018 | Transect 6000 | 0.88 | 4.33 | 10.96 | 24.00 | 106.00 | 4.10 | 2.20 | 170.00 | 3.66 | 24.60 | 0.60 | 0.30 | 3.90 | 3.60 |
| MP016006 FD | Transect 6000 | 0.56 | 7.60 | 10.30 | 31.60 | 103.00 | 10.90 | 5.60 | 283.00 | 3.14 | 7.40 | 1.00 | 0.50 | 5.60 | 7.70 |
| MP016006 | Transect 6000 | 0.40 | 4.40 | 7.54 | 23.80 | 61.00 | 6.70 | 3.80 | 127.00 | 2.05 | 5.60 | 0.70 | 0.60 | 4.10 | 5.30 |
| MP016040 FD | Transect 6000 | 0.70 | 11.27 | 13.52 | 154.50 | 120.00 | 17.30 | 6.40 | 173.00 | 4.11 | 221.90 | 1.90 | 0.70 | 9.00 | 5.10 |
| MP016040 | Transect 6000 | 0.80 | 11.60 | 13.96 | 147.40 | 120.00 | 16.80 | 6.30 | 189.00 | 5.09 | 255.20 | 1.90 | 3.00 | 7.70 | 4.90 |
| MP016046 FD | Transect 6000 | 0.76 | 4.86 | 22.29 | 106.80 | 248.00 | 6.20 | 4.00 | 543.00 | 3.29 | 12.30 | 0.80 | < .2 | 4.40 | 4.30 |
| MP016046 | Transect 6000 | 0.88 | 6.00 | 27.44 | 98.20 | 212.00 | 6.50 | 4.90 | 910.00 | 4.15 | 18.70 | 1.10 | 0.80 | 5.80 | 4.80 |
| MP016081 | Transect 6000 | 0.51 | 6.70 | 15.34 | 90.90 | 30.00 | 12.40 | 6.90 | 567.00 | 2.93 | 4.00 | 0.50 | 0.40 | 3.50 | 5.10 |
| MP016081 FD | Transect 6000 | 0.36 | 5.93 | 13.14 | 88.40 | 31.00 | 11.90 | 6.30 | 527.00 | 2.69 | 3.80 | 0.50 | 6.70 | 3.20 | 5.30 |
| MP016019 LD | Transect 6000 | 0.80 | 6.88 | 14.20 | 49.00 | 60.00 | 8.50 | 3.60 | 244.00 | 2.93 | 17.30 | 0.70 | 1.00 | 5.00 | 3.70 |
| MP016019 | Transect 6000 | 0.89 | 8.48 | 17.68 | 50.10 | 80.00 | 8.60 | 4.10 | 236.00 | 3.13 | 18.10 | 0.80 | < .2 | 5.30 | 4.30 |
| MP016025 LD | Transect 6000 | 1.27 | 12.22 | 25.27 | 44.50 | 71.00 | 7.70 | 6.40 | 413.00 | 3.94 | 29.70 | 1.10 | 0.70 | 8.20 | 3.80 |
| MP016025 | Transect 6000 | 1.14 | 13.58 | 23.31 | 40.80 | 88.00 | 7.20 | 6.70 | 395.00 | 4.19 | 30.60 | 1.00 | 1.70 | 5.80 | 3.50 |
| MP016060 LD | Transect 6000 | 0.83 | 3.70 | 13.36 | 34.90 | 23.00 | 5.50 | 2.50 | 130.00 | 2.94 | 11.60 | 0.50 | 0.60 | 3.60 | 3.50 |
| MP016060 | Transect 6000 | 0.85 | 4.08 | 12.64 | 33.70 | 25.00 | 5.50 | 2.80 | 140.00 | 3.19 | 14.30 | 0.50 | 1.20 | 3.60 | 4.30 |
| MP016083 LD | Transect 6000 | 0.34 | 7.60 | 12.24 | 75.70 | 48.00 | 14.30 | 6.80 | 445.00 | 2.56 | 4.60 | 0.50 | 0.80 | 3.00 | 4.30 |
| MP016083 | Transect 6000 | 0.38 | 7.82 | 15.38 | 76.10 | 61.00 | 15.40 | 6.60 | 442.00 | 2.55 | 4.00 | 0.40 | 0.30 | 3.10 | 4.40 |
| MP016101 LD | Transect 6000 | 0.43 | 5.87 | 31.62 | 62.60 | 78.00 | 4.30 | 2.60 | 203.00 | 2.57 | 10.30 | 0.60 | 5.70 | 2.80 | 2.80 |
| MP016101 | Transect 6000 | 0.57 | 6.12 | 37.46 | 61.20 | 110.00 | 4.30 | 2.60 | 206.00 | 2.74 | 13.20 | 0.80 | 0.30 | 3.60 | 2.80 |
| MP016113 LD | Transect 6000 | 0.40 | 4.00 | 19.64 | 72.80 | 16.00 | 4.80 | 3.30 | 285.00 | 2.12 | 5.90 | 0.60 | 1.70 | 3.20 | 3.70 |
| MP016113 | Transect 6000 | 0.47 | 4.78 | 21.49 | 67.60 | 18.00 | 4.80 | 3.10 | 265.00 | 2.02 | 5.80 | 0.70 | 1.10 | 3.60 | 3.50 |
| MP016014 | Transect 6000 | 1.57 | 9.35 | 25.72 | 35.60 | 136.00 | 5.90 | 3.30 | 150.00 | 3.83 | 25.50 | 1.00 | 0.80 | 7.80 | 4.10 |
| RE MP016014 | Transect 6000 | 1.32 | 9.13 | 25.24 | 33.50 | 128.00 | 6.10 | 3.40 | 165.00 | 4.10 | 22.70 | 0.80 | 1.20 | 5.90 | 4.30 |
| MP016048 | Transect 6000 | 0.79 | 6.18 | 12.30 | 46.10 | 59.00 | 7.40 | 3.90 | 197.00 | 2.53 | 5.70 | 0.70 | 1.90 | 4.60 | 5.50 |
| RE MP016048 | Transect 6000 | 0.84 | 5.57 | 11.95 | 41.00 | 58.00 | 6.90 | 3.80 | 199.00 | 2.60 | 7.10 | 0.80 | 1.60 | 5.10 | 5.10 |
| MP016070 | Transect 6000 | 0.47 | 9.45 | 53.64 | 80.90 | 68.00 | 6.70 | 3.80 | 217.00 | 2.42 | 8.10 | 0.40 | 0.60 | 2.80 | 3.20 |
| RE MP016070 | Transect 6000 | 0.50 | 9.11 | 56.29 | 79.40 | 70.00 | 6.50 | 3.90 | 222.00 | 2.39 | 9.40 | 0.60 | 2.10 | 3.50 | 3.30 |
| MP016104 | Transect 6000 | 0.51 | 4.66 | 39.93 | 35.90 | 93.00 | 3.50 | 1.80 | 112.00 | 2.47 | 9.90 | 0.70 | 0.40 | 3.10 | 2.80 |
| RE MP016104 | Transect 6000 | 0.53 | 4.98 | 35.83 | 38.70 | 99.00 | 3.30 | 1.80 | 117.00 | 2.42 | 9.70 | 0.70 | 0.30 | 3.40 | 3.20 |
| STANDARD DS3 |  | 4.41 | 65.97 | 17.65 | 81.10 | 144.00 | 17.50 | 6.60 | 431.00 | 1.62 | 15.30 | 2.90 | 10.80 | 1.90 | 15.70 |
| STANDARD DS3 |  | 4.52 | 64.07 | 18.08 | 80.10 | 143.00 | 18.30 | 6.80 | 439.00 | 1.69 | 15.00 | 2.80 | 10.00 | 1.80 | 14.80 |
| STANDARD DS3 |  | 4.48 | 61.90 | 17.27 | 82.70 | 140.00 | 18.30 | 6.60 | 411.00 | 1.67 | 15.20 | 2.90 | 10.20 | 2.00 | 15.00 |
| STANDARD DS3 |  | 4.56 | 64.08 | 17.97 | 77.00 | 144.00 | 17.50 | 6.50 | 404.00 | 1.60 | 14.80 | 2.80 | 10.20 | 1.90 | 14.50 |
| STANDARD DS3 |  | 4.69 | 61.25 | 18.01 | 78.80 | 145.00 | 18.40 | 6.20 | 410.00 | 1.64 | 15.70 | 3.00 | 10.70 | 2.10 | 14.50 |
| STANDARD DS3 |  | 4.83 | 63.40 | 17.68 | 81.30 | 146.00 | 18.40 | 6.80 | 425.00 | 1.58 | 15.70 | 3.20 | 10.10 | 2.00 | 13.90 |
| STANDARD DS3 |  | 4.35 | 64.12 | 17.30 | 82.10 | 141.00 | 17.50 | 6.50 | 428.00 | 1.60 | 15.80 | 2.80 | 10.10 | 1.80 | 14.60 |

Appendix 9. Quality control data, QPX and QPVX project, Bathurst Mining Camp, New Brunswick - (ICP-MS)

| SAMPLEID | Area | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppb | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppb | Th ppm | Sr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MP027003 FD | Railroad | 1.03 | 14.46 | 25.66 | 131.80 | 219.00 | 26.60 | 6.60 | 239.00 | 7.90 | 18.80 | 2.50 | 0.60 | 10.60 | 17.40 |
| MP027003 | Railroad | 1.06 | 13.62 | 25.68 | 206.80 | 163.00 | 24.60 | 5.90 | 267.00 | 7.68 | 17.50 | 2.50 | 3.70 | 11.90 | 16.30 |
| MP027040 FD | Railroad | 2.11 | 27.78 | 35.87 | 143.60 | 72.00 | 38.80 | 16.00 | 589.00 | 5.53 | 39.40 | 2.10 | 4.60 | 13.10 | 14.60 |
| MP027040 | Railroad | 2.09 | 26.35 | 38.33 | 149.50 | 74.00 | 38.30 | 15.70 | 766.00 | 5.35 | 38.70 | 2.20 | < .2 | 12.90 | 16.00 |
| MP027060 FD | Railroad | 1.07 | 7.36 | 15.01 | 58.10 | 51.00 | 16.70 | 5.20 | 236.00 | 4.53 | 14.20 | 1.00 | 2.60 | 5.80 | 6.40 |
| MP027060 | Railroad | 0.92 | 5.63 | 9.99 | 42.00 | 30.00 | 14.90 | 4.00 | 182.00 | 3.38 | 13.60 | 0.80 | 4.80 | 4.50 | 6.60 |
| MP027072 FD | Railroad | 1.28 | 13.45 | 18.38 | 84.70 | 136.00 | 22.90 | 17.00 | 587.00 | 4.36 | 21.70 | 1.30 | 6.90 | 8.00 | 8.00 |
| MP027072 | Railroad | 1.00 | 9.26 | 16.38 | 67.90 | 215.00 | 13.90 | 11.10 | 647.00 | 4.03 | 16.30 | 1.10 | 4.90 | 6.60 | 8.50 |
| MP027084 FD | Railroad | 4.66 | 24.31 | 41.22 | 153.40 | 198.00 | 26.80 | 11.00 | 377.00 | 9.38 | 37.80 | 2.20 | 7.90 | 10.80 | 9.80 |
| MP027084 | Railroad | 4.97 | 21.87 | 43.49 | 141.20 | 346.00 | 25.40 | 11.20 | 369.00 | 9.69 | 38.60 | 2.30 | 3.30 | 11.20 | 11.40 |
| MP027114 FD | Mount Fronsac | 0.78 | 10.18 | 25.73 | 52.40 | 40.00 | 12.10 | 4.50 | 211.00 | 2.98 | 24.20 | 1.40 | 1.00 | 6.30 | 4.80 |
| MP027114 | Mount Fronsac | 1.05 | 12.67 | 29.50 | 57.10 | 38.00 | 12.30 | 4.80 | 220.00 | 3.66 | 31.80 | 1.30 | 2.80 | 6.10 | 5.60 |
| MP027132 FD | Mount Fronsac | 1.01 | 8.08 | 31.37 | 59.50 | 48.00 | 8.40 | 4.50 | 411.00 | 8.34 | 15.30 | 1.50 | 1.30 | 11.30 | 4.20 |
| MP027132 | Mount Fronsac | 0.96 | 9.49 | 28.36 | 57.00 | 42.00 | 6.90 | 3.60 | 408.00 | 8.16 | 16.00 | 1.30 | 1.20 | 8.40 | 4.50 |
| MP027153 FD | Camel Back | 1.37 | 6.92 | 36.79 | 64.90 | 82.00 | 10.10 | 5.00 | 538.00 | 7.63 | 21.90 | 1.00 | 1.20 | 7.20 | 6.20 |
| MP027153 | Camel Back | 1.15 | 4.92 | 25.12 | 50.90 | 55.00 | 6.80 | 3.30 | 358.00 | 5.83 | 16.90 | 0.80 | 1.00 | 6.30 | 7.70 |
| MP027167 FD | Camel Back | 2.15 | 16.32 | 51.84 | 65.00 | 144.00 | 13.50 | 5.90 | 334.00 | 10.28 | 29.20 | 1.60 | 0.40 | 9.00 | 10.30 |
| MP027167 | Camel Back | 1.39 | 11.39 | 38.01 | 56.70 | 61.00 | 10.40 | 5.10 | 297.00 | 5.31 | 20.70 | 1.30 | 1.50 | 8.50 | 8.70 |
| MP027123 LD | Mount Fronsac | 1.32 | 9.49 | 96.78 | 93.70 | 113.00 | 1.90 | 2.80 | 504.00 | 5.98 | 10.20 | 0.70 | 0.80 | 5.10 | 6.10 |
| MP027123 | Mount Fronsac | 1.43 | 10.63 | 103.28 | 101.00 | 129.00 | 1.90 | 3.00 | 521.00 | 6.48 | 10.90 | 0.80 | 0.30 | 5.70 | 6.70 |
| MP027133 LD | Mount Fronsac | 0.75 | 4.54 | 20.20 | 52.40 | 30.00 | 3.20 | 2.00 | 289.00 | 6.68 | 13.90 | 1.00 | < .2 | 7.50 | 3.90 |
| MP027133 | Mount Fronsac | 0.78 | 4.81 | 21.60 | 52.40 | 40.00 | 3.20 | 1.90 | 271.00 | 7.02 | 14.60 | 1.00 | < .2 | 7.70 | 3.70 |
| MP027158 LD | Camel Back | 1.06 | 12.49 | 43.63 | 84.40 | 260.00 | 10.20 | 6.70 | 991.00 | 6.55 | 19.30 | 1.30 | 1.20 | 9.90 | 6.30 |
| MP027158 | Camel Back | 0.98 | 12.74 | 42.55 | 86.00 | 255.00 | 11.70 | 7.30 | 1064.00 | 7.10 | 20.80 | 1.30 | 0.60 | 10.10 | 6.90 |
| MP027169 LD | Camel Back | 0.83 | 4.07 | 22.57 | 57.00 | 117.00 | 5.70 | 3.50 | 518.00 | 4.03 | 11.20 | 0.90 | 2.20 | 6.40 | 7.70 |
| MP027169 | Camel Back | 0.75 | 4.49 | 20.07 | 58.00 | 116.00 | 5.50 | 3.70 | 552.00 | 4.11 | 10.60 | 0.90 | 2.70 | 5.70 | 6.60 |
| MP027120 | Mount Fronsac | 0.84 | 2.23 | 23.68 | 48.80 | 15.00 | 0.80 | 1.00 | 405.00 | 1.13 | 4.20 | 0.60 | 2.40 | 4.00 | 7.30 |
| RE MP027120 | Mount Fronsac | 0.77 | 2.09 | 23.83 | 46.90 | 16.00 | 0.60 | 1.10 | 410.00 | 1.16 | 3.80 | 0.60 | 0.60 | 4.00 | 7.50 |
| MP027150 | Camel Back | 1.05 | 4.84 | 26.95 | 62.20 | 38.00 | 5.50 | 3.40 | 210.00 | 5.11 | 12.30 | 0.80 | 4.70 | 5.90 | 8.10 |
| RE MP027150 | Camel Back | 1.05 | 5.15 | 27.61 | 65.80 | 35.00 | 6.20 | 3.20 | 209.00 | 5.18 | 12.00 | 0.90 | 3.50 | 6.00 | 8.50 |
| MP027170 | Camel Back | 1.29 | 6.92 | 29.55 | 72.70 | 102.00 | 7.80 | 4.70 | 648.00 | 6.40 | 16.70 | 1.10 | 2.40 | 8.10 | 6.50 |
| RE MP027170 | Camel Back | 1.25 | 6.74 | 29.34 | 68.30 | 98.00 | 7.60 | 4.60 | 618.00 | 6.16 | 16.50 | 1.10 | 1.60 | 7.60 | 6.20 |
| MP027195 FD | Taylor Brook | 2.27 | 283.24 | 2098.38 | 3714.50 | 4270.00 | 33.90 | 30.40 | 9495.00 | 4.68 | 121.50 | 0.70 | 319.40 | 1.90 | 239.30 |
| MP027195 | Taylor Brook | 2.51 | 245.75 | 2530.80 | 3834.20 | 3544.00 | 37.60 | 28.90 | 12222.00 | 4.38 | 81.00 | 0.60 | 823.80 | 2.10 | 330.30 |
| MP027187 LD | Taylor Brook | 1.92 | 212.04 | 1197.66 | 2644.80 | 2632.00 | 27.60 | 26.90 | 20521.00 | 3.20 | 69.50 | 0.60 | 506.60 | 1.80 | 604.30 |
| MP027187 | Taylor Brook | 1.95 | 221.62 | 1208.96 | 2634.20 | 2800.00 | 27.10 | 27.80 | 21108.00 | 3.33 | 77.30 | 0.60 | 444.70 | 1.90 | 594.30 |
| MP027190 | Taylor Brook | 1.10 | 177.22 | 538.38 | 2093.10 | 1286.00 | 15.30 | 10.20 | 16489.00 | 1.28 | 34.00 | 0.20 | 421.70 | 0.70 | 1283.50 |
| RE MP027190 | Taylor Brook | 1.02 | 171.37 | 535.43 | 2179.90 | 1192.00 | 15.30 | 10.80 | 16937.00 | 1.25 | 33.00 | 0.20 | 358.20 | 0.70 | 1347.60 |
| STANDARD DS4 |  | 6.45 | 124.38 | 32.24 | 149.70 | 293.00 | 35.00 | 12.40 | 789.00 | 3.13 | 23.00 | 6.00 | 26.40 | 3.90 | 27.50 |
| STANDARD DS4 |  | 6.53 | 128.09 | 32.83 | 153.70 | 300.00 | 35.80 | 12.70 | 771.00 | 3.12 | 23.00 | 5.60 | 26.00 | 3.80 | 27.30 |
| STANDARD DS4 |  | 6.84 | 130.15 | 32.64 | 153.90 | 304.00 | 34.90 | 12.60 | 761.00 | 3.10 | 23.20 | 5.90 | 24.70 | 3.80 | 29.00 |
| STANDARD DS4 |  | 6.52 | 122.48 | 30.82 | 154.40 | 269.00 | 33.80 | 12.20 | 824.00 | 3.13 | 21.40 | 6.40 | 27.30 | 3.70 | 26.70 |

## Appendix 9. Quality control data, QPX and QPVX project, Bathurst Mining Camp, New Brunswick - (ICP-MS)

| SAMPLEID | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Sc ppm | Tl ppm | S % | Hg ppb |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MP015001 | 0.10 | 0.19 | 0.47 | 72.00 | 0.06 | 0.07 | 8.50 | 35.90 | 0.48 | 73.70 | 0.12 | 1.00 | 2.16 | 0.02 | 0.34 | < .2 | 2.40 | 0.20 | < .01 | < 5 |
| MP015001 FD | 0.11 | 0.18 | 0.42 | 84.00 | 0.07 | 0.08 | 8.40 | 31.50 | 0.42 | 72.30 | 0.14 | 2.00 | 2.03 | 0.01 | 0.33 | < .2 | 2.80 | 0.22 | 0.01 | < 5 |
| MP015015 | 0.19 | 0.19 | 0.33 | 83.00 | 0.03 | 0.05 | 9.00 | 51.00 | 0.25 | 61.10 | 0.13 | < 1 | 4.37 | 0.02 | 0.20 | < .2 | 4.10 | 0.15 | 0.02 | < 5 |
| MP015015 FD | 0.09 | 0.21 | 0.43 | 90.00 | 0.02 | 0.05 | 9.30 | 37.60 | 0.21 | 59.90 | 0.12 | 2.00 | 3.53 | 0.02 | 0.20 | < .2 | 3.70 | 0.15 | 0.03 | < 5 |
| MP015029 | 0.12 | 0.21 | 0.40 | 57.00 | 0.10 | 0.17 | 8.10 | 30.10 | 0.30 | 75.50 | 0.10 | 2.00 | 3.57 | 0.02 | 0.32 | < .2 | 2.40 | 0.20 | 0.02 | < 5 |
| MP015029 FD | 0.17 | 0.21 | 0.40 | 57.00 | 0.07 | 0.13 | 10.00 | 29.50 | 0.31 | 83.20 | 0.08 | 3.00 | 3.84 | 0.02 | 0.36 | < .2 | 2.60 | 0.24 | 0.06 | < 5 |
| MP015045 | 0.09 | 0.31 | 0.34 | 48.00 | 0.03 | 0.07 | 13.50 | 28.60 | 0.35 | 57.40 | 0.08 | < 1 | 2.58 | 0.01 | 0.25 | < .2 | 2.60 | 0.15 | 0.03 | < 5 |
| MP015045 FD | 0.07 | 0.30 | 0.37 | 51.00 | 0.03 | 0.07 | 14.20 | 28.00 | 0.31 | 55.10 | 0.09 | 1.00 | 2.44 | 0.01 | 0.27 | < .2 | 2.50 | 0.15 | 0.05 | < 5 |
| MP015073 | 0.22 | 0.68 | 0.32 | 44.00 | 0.06 | 0.13 | 9.20 | 27.30 | 0.26 | 82.30 | 0.05 | 3.00 | 2.87 | 0.02 | 0.37 | < .2 | 2.40 | 0.16 | 0.01 | < 5 |
| MP015073 FD | 0.08 | 0.09 | 0.32 | 47.00 | 0.03 | 0.14 | 8.50 | 23.80 | 0.24 | 60.20 | 0.05 | 1.00 | 2.25 | 0.02 | 0.38 | < .2 | 2.20 | 0.21 | 0.03 | < 5 |
| MP015085 | 0.11 | 0.25 | 0.30 | 40.00 | 0.03 | 0.18 | 9.10 | 31.00 | 0.21 | 52.10 | 0.02 | 1.00 | 3.96 | 0.02 | 0.30 | < .2 | 3.10 | 0.17 | 0.04 | < 5 |
| MP015085 FD | 0.07 | 0.20 | 0.31 | 44.00 | 0.02 | 0.16 | 10.60 | 22.10 | 0.17 | 48.60 | 0.02 | 2.00 | 2.20 | 0.01 | 0.33 | < .2 | 2.20 | 0.24 | < .01 | < 5 |
| MP015097 | 0.06 | 0.12 | 0.26 | 53.00 | 0.02 | 0.13 | 8.40 | 26.30 | 0.28 | 71.20 | 0.06 | 2.00 | 3.41 | 0.02 | 0.35 | < .2 | 2.60 | 0.22 | < .01 | < 5 |
| MP015097 FD | 0.05 | 0.14 | 0.28 | 54.00 | 0.03 | 0.11 | 8.80 | 24.90 | 0.30 | 76.50 | 0.05 | 2.00 | 3.12 | 0.02 | 0.34 | < .2 | 2.50 | 0.21 | < .01 | < 5 |
| RE MP015018 | 0.10 | 0.31 | 0.36 | 53.00 | 0.04 | 0.09 | 9.70 | 33.20 | 0.36 | 61.50 | 0.09 | 2.00 | 3.45 | 0.02 | 0.30 | < .2 | 2.70 | 0.18 | 0.03 | < 5 |
| MP015040 | 0.10 | 0.16 | 0.34 | 33.00 | 0.11 | 0.06 | 18.80 | 27.30 | 0.53 | 105.30 | 0.06 | 1.00 | 1.98 | 0.02 | 0.35 | < .2 | 2.40 | 0.21 | < .01 | < 5 |
| RE MP015040 | 0.11 | 0.19 | 0.36 | 31.00 | 0.11 | 0.06 | 19.00 | 25.50 | 0.53 | 104.40 | 0.06 | 2.00 | 1.95 | 0.02 | 0.35 | < .2 | 2.50 | 0.21 | < .01 | < 5 |
| RE MP015078 | 0.04 | 0.27 | 0.25 | 30.00 | 0.03 | 0.06 | 8.10 | 30.20 | 0.39 | 69.20 | 0.03 | 2.00 | 2.38 | 0.01 | 0.30 | < .2 | 2.20 | 0.12 | 0.05 | < 5 |
| MP015078 | 0.04 | 0.26 | 0.24 | 28.00 | 0.02 | 0.06 | 8.10 | 31.40 | 0.40 | 70.10 | 0.03 | 1.00 | 2.40 | 0.01 | 0.27 | < .2 | 2.20 | 0.12 | 0.03 | < 5 |
| MP015096 | 0.04 | 0.18 | 0.23 | 57.00 | 0.01 | 0.11 | 5.40 | 22.60 | 0.20 | 36.40 | 0.08 | 2.00 | 2.49 | 0.01 | 0.20 | < .2 | 2.80 | 0.19 | < .01 | < 5 |
| RE MP015096 | 0.04 | 0.20 | 0.24 | 59.00 | 0.01 | 0.12 | 6.20 | 23.20 | 0.20 | 36.60 | 0.08 | 2.00 | 2.50 | 0.01 | 0.22 | < .2 | 3.10 | 0.20 | < .01 | < 5 |
| MP015018 LD | 0.12 | 0.25 | 0.39 | 51.00 | 0.05 | 0.09 | 11.20 | 31.30 | 0.37 | 62.10 | 0.09 | 2.00 | 3.58 | 0.02 | 0.33 | < .2 | 2.80 | 0.19 | 0.07 | < 5 |
| MP015018 | 0.11 | 0.30 | 0.37 | 53.00 | 0.05 | 0.09 | 10.00 | 32.60 | 0.36 | 60.60 | 0.09 | 3.00 | 3.41 | 0.02 | 0.31 | < .2 | 2.80 | 0.18 | 0.02 | < 5 |
| MP015038 LD | 0.07 | 0.28 | 0.37 | 34.00 | 0.04 | 0.09 | 8.60 | 24.70 | 0.32 | 64.80 | 0.05 | 1.00 | 2.54 | 0.01 | 0.29 | < .2 | 2.40 | 0.17 | 0.04 | < 5 |
| MP015038 | 0.29 | 0.29 | 0.39 | 37.00 | 0.05 | 0.09 | 9.90 | 25.90 | 0.32 | 69.30 | 0.05 | 3.00 | 2.66 | 0.01 | 0.30 | < .2 | 2.50 | 0.20 | 0.01 | < 5 |
| MP015060 LD | 0.54 | 0.10 | 0.51 | 49.00 | 0.03 | 0.08 | 12.20 | 17.20 | 0.30 | 47.20 | 0.09 | 2.00 | 2.63 | 0.02 | 0.31 | < .2 | 2.50 | 0.16 | 0.04 | < 5 |
| MP015060 | 0.09 | 0.10 | 0.57 | 49.00 | 0.03 | 0.07 | 15.20 | 16.80 | 0.29 | 47.10 | 0.09 | < 1 | 2.70 | 0.01 | 0.29 | < .2 | 2.60 | 0.14 | 0.06 | < 5 |
| MP015081 LD | 0.11 | 0.12 | 0.23 | 31.00 | 0.06 | 0.08 | 10.10 | 27.70 | 0.38 | 65.30 | 0.03 | 2.00 | 2.16 | 0.02 | 0.34 | < .2 | 2.10 | 0.16 | 0.02 | < 5 |
| MP015081 | 0.13 | 0.12 | 0.22 | 35.00 | 0.07 | 0.08 | 10.30 | 29.40 | 0.40 | 70.40 | 0.03 | 2.00 | 2.23 | 0.02 | 0.44 | < .2 | 2.40 | 0.16 | 0.05 | < 5 |
| MP015097 LD | 0.06 | 0.11 | 0.29 | 54.00 | 0.02 | 0.13 | 7.60 | 23.00 | 0.27 | 68.90 | 0.06 | 1.00 | 3.35 | 0.02 | 0.34 | < .2 | 2.40 | 0.19 | 0.02 | < 5 |
| MP015097 | 0.06 | 0.12 | 0.26 | 53.00 | 0.02 | 0.13 | 8.40 | 26.30 | 0.28 | 71.20 | 0.06 | 2.00 | 3.41 | 0.02 | 0.35 | < .2 | 2.60 | 0.22 | < .01 | < 5 |
| MP016018 FD | 0.06 | 0.20 | 0.26 | 68.00 | 0.01 | 0.17 | 6.50 | 27.40 | 0.17 | 39.50 | 0.06 | 3.00 | 2.24 | 0.01 | 0.21 | < .2 | 1.70 | 0.13 | 0.02 | 7.00 |
| MP016018 | 0.09 | 0.23 | 0.29 | 69.00 | 0.01 | 0.20 | 8.50 | 23.40 | 0.15 | 43.70 | 0.06 | 1.00 | 2.14 | 0.01 | 0.28 | < .2 | 2.30 | 0.15 | 0.02 | 6.00 |
| MP016006 FD | 0.06 | 0.13 | 0.36 | 47.00 | 0.04 | 0.08 | 11.10 | 21.50 | 0.30 | 79.40 | 0.07 | 2.00 | 2.53 | 0.02 | 0.30 | < .2 | 2.00 | 0.18 | < .01 | < 5 |
| MP016006 | 0.04 | 0.10 | 0.21 | 31.00 | 0.03 | 0.06 | 9.30 | 16.20 | 0.17 | 50.80 | 0.05 | 4.00 | 1.55 | 0.01 | 0.24 | < .2 | 1.60 | 0.14 | < .01 | < 5 |
| MP016040 FD | 0.24 | 0.22 | 0.48 | 50.00 | 0.04 | 0.11 | 11.00 | 42.90 | 0.29 | 70.90 | 0.05 | 2.00 | 4.43 | 0.02 | 0.31 | < .2 | 4.30 | 0.17 | 0.05 | 7.00 |
| MP016040 | 0.28 | 0.24 | 0.55 | 63.00 | 0.03 | 0.12 | 10.60 | 48.90 | 0.28 | 67.80 | 0.06 | 3.00 | 5.36 | 0.02 | 0.32 | 0.30 | 4.60 | 0.17 | 0.09 | < 5 |
| MP016046 FD | 0.13 | 0.23 | 0.26 | 42.00 | 0.02 | 0.15 | 6.80 | 24.80 | 0.23 | 51.80 | 0.08 | 2.00 | 3.02 | 0.01 | 0.21 | < .2 | 2.00 | 0.13 | < .01 | < 5 |
| MP016046 | 0.21 | 0.36 | 0.35 | 49.00 | 0.03 | 0.14 | 10.30 | 29.70 | 0.26 | 60.00 | 0.10 | 3.00 | 2.67 | 0.02 | 0.25 | < .2 | 2.80 | 0.16 | < .01 | < 5 |
| MP016081 | 0.06 | 0.16 | 0.24 | 46.00 | 0.05 | 0.15 | 6.10 | 32.40 | 0.45 | 74.10 | 0.09 | < 1 | 2.29 | 0.01 | 0.26 | < .2 | 2.00 | 0.15 | 0.03 | < 5 |
| MP016081 FD | 0.07 | 0.15 | 0.22 | 42.00 | 0.05 | 0.12 | 5.90 | 31.70 | 0.42 | 72.50 | 0.08 | 1.00 | 2.21 | 0.02 | 0.23 | < .2 | 2.00 | 0.16 | < .01 | < 5 |
| MP016019 LD | 0.07 | 0.22 | 0.23 | 34.00 | 0.02 | 0.09 | 8.20 | 25.50 | 0.26 | 48.60 | 0.05 | 2.00 | 2.81 | 0.01 | 0.21 | < .2 | 2.20 | 0.15 | 0.02 | < 5 |
| MP016019 | 0.09 | 0.30 | 0.28 | 42.00 | 0.02 | 0.10 | 10.20 | 26.40 | 0.25 | 48.10 | 0.05 | 2.00 | 2.62 | 0.01 | 0.28 | < .2 | 2.50 | 0.12 | 0.03 | < 5 |
| MP016025 LD | 0.08 | 0.50 | 0.49 | 39.00 | 0.02 | 0.09 | 9.40 | 27.70 | 0.26 | 54.50 | 0.06 | 1.00 | 2.64 | 0.01 | 0.24 | < .2 | 2.20 | 0.18 | 0.05 | 8.00 |
| MP016025 | 0.08 | 0.47 | 0.34 | 47.00 | 0.01 | 0.08 | 9.80 | 26.70 | 0.24 | 47.20 | 0.06 | 1.00 | 2.54 | 0.01 | 0.22 | < .2 | 1.90 | 0.16 | 0.01 | < 5 |
| MP016060 LD | 0.04 | 0.22 | 0.31 | 48.00 | 0.01 | 0.05 | 6.50 | 17.80 | 0.20 | 39.30 | 0.07 | 1.00 | 1.68 | 0.01 | 0.24 | < .2 | 1.60 | 0.21 | 0.02 | < 5 |
| MP016060 | 0.07 | 0.26 | 0.34 | 50.00 | 0.01 | 0.04 | 8.20 | 20.50 | 0.21 | 43.20 | 0.09 | 1.00 | 1.79 | 0.01 | 0.22 | < .2 | 1.90 | 0.20 | < .01 | 8.00 |
| MP016083 LD | 0.04 | 0.15 | 0.20 | 39.00 | 0.03 | 0.08 | 7.30 | 35.60 | 0.56 | 73.30 | 0.08 | < 1 | 1.83 | 0.02 | 0.28 | < .2 | 2.30 | 0.15 | < .01 | < 5 |
| MP016083 | 0.02 | 0.15 | 0.21 | 41.00 | 0.02 | 0.09 | 6.60 | 31.80 | 0.54 | 73.90 | 0.08 | < 1 | 1.83 | 0.01 | 0.28 | < .2 | 1.90 | 0.16 | 0.01 | < 5 |
| MP016101 LD | 0.08 | 0.29 | 0.37 | 34.00 | 0.01 | 0.09 | 7.50 | 13.60 | 0.34 | 56.80 | 0.06 | 1.00 | 1.59 | 0.01 | 0.27 | < .2 | 2.10 | 0.20 | < .01 | < 5 |
| MP016101 | 0.10 | 0.40 | 0.49 | 38.00 | 0.01 | 0.10 | 9.30 | 14.60 | 0.34 | 57.50 | 0.07 | 4.00 | 1.59 | 0.01 | 0.37 | < .2 | 2.70 | 0.17 | 0.02 | < 5 |
| MP016113 LD | 0.07 | 0.28 | 0.30 | 35.00 | 0.02 | 0.14 | 9.20 | 14.80 | 0.38 | 64.40 | 0.06 | 2.00 | 1.73 | 0.02 | 0.29 | < .2 | 2.30 | 0.21 | < .01 | 5.00 |
| MP016113 | 0.05 | 0.28 | 0.32 | 32.00 | 0.03 | 0.14 | 9.90 | 12.10 | 0.36 | 57.40 | 0.05 | 2.00 | 1.66 | 0.01 | 0.32 | < .2 | 2.40 | 0.19 | < .01 | < 5 |
| MP016014 | 0.08 | 0.28 | 0.45 | 45.00 | 0.02 | 0.11 | 10.00 | 19.40 | 0.23 | 47.50 | 0.07 | 1.00 | 2.38 | 0.01 | 0.30 | < .2 | 1.90 | 0.13 | 0.04 | 5.00 |
| RE MP016014 | 0.06 | 0.29 | 0.37 | 49.00 | 0.01 | 0.12 | 8.60 | 21.90 | 0.24 | 48.80 | 0.07 | 2.00 | 2.49 | 0.01 | 0.22 | < .2 | 1.60 | 0.13 | 0.02 | < 5 |
| MP016048 | 0.04 | 0.12 | 0.20 | 42.00 | 0.01 | 0.05 | 10.90 | 18.60 | 0.36 | 73.50 | 0.05 | 1.00 | 1.99 | 0.02 | 0.35 | < .2 | 2.30 | 0.21 | 0.02 | < 5 |
| RE MP016048 | 0.04 | 0.12 | 0.21 | 43.00 | 0.01 | 0.05 | 13.30 | 20.60 | 0.37 | 76.10 | 0.05 | 3.00 | 2.02 | 0.02 | 0.42 | < .2 | 3.10 | 0.20 | < .01 | < 5 |
| MP016070 | 0.03 | 0.30 | 0.55 | 35.00 | 0.01 | 0.10 | 7.20 | 14.30 | 0.34 | 64.30 | 0.04 | < 1 | 1.98 | 0.01 | 0.27 | < .2 | 2.10 | 0.22 | 0.02 | < 5 |
| RE MP016070 | 0.04 | 0.31 | 0.56 | 34.00 | 0.02 | 0.10 | 8.50 | 14.80 | 0.33 | 62.70 | 0.04 | < 1 | 1.96 | 0.01 | 0.35 | < .2 | 2.50 | 0.22 | 0.04 | < 5 |
| MP016104 | 0.08 | 0.34 | 0.42 | 41.00 | 0.01 | 0.05 | 9.40 | 13.20 | 0.21 | 48.20 | 0.07 | 2.00 | 1.47 | 0.01 | 0.29 | < .2 | 2.30 | 0.17 | 0.01 | < 5 |
| RE MP016104 | 0.08 | 0.37 | 0.48 | 41.00 | 0.01 | 0.06 | 9.50 | 12.10 | 0.21 | 48.70 | 0.07 | 1.00 | 1.47 | 0.01 | 0.32 | < .2 | 2.20 | 0.18 | 0.02 | < 5 |
| STANDARD DS3 | 2.75 | 2.37 | 2.46 | 42.00 | 0.29 | 0.05 | 9.00 | 90.90 | 0.32 | 78.30 | 0.05 | 5.00 | 0.85 | 0.02 | 0.08 | 1.70 | 1.40 | 0.57 | 0.03 | 109.00 |
| STANDARD DS3 | 2.66 | 2.37 | 2.57 | 41.00 | 0.30 | 0.05 | 9.00 | 94.80 | 0.32 | 84.80 | 0.05 | 3.00 | 0.88 | 0.02 | 0.07 | 2.00 | 1.40 | 0.52 | 0.03 | 114.00 |
| STANDARD DS3 | 2.59 | 2.39 | 2.52 | 42.00 | 0.29 | 0.05 | 8.90 | 96.30 | 0.31 | 79.80 | 0.05 | 1.00 | 0.86 | 0.02 | 0.09 | 1.80 | 1.50 | 0.53 | 0.02 | 109.00 |
| STANDARD DS3 | 2.88 | 2.55 | 2.87 | 41.00 | 0.27 | 0.05 | 9.00 | 95.60 | 0.31 | 78.90 | 0.05 | 1.00 | 0.85 | 0.02 | 0.09 | 2.00 | 1.30 | 0.54 | 0.02 | 113.00 |
| STANDARD DS3 | 2.95 | 2.57 | 2.89 | 41.00 | 0.27 | 0.05 | 9.30 | 92.60 | 0.30 | 78.50 | 0.05 | 1.00 | 0.85 | 0.02 | 0.09 | 2.10 | 1.50 | 0.55 | 0.02 | 124.00 |
| STANDARD DS3 | 2.82 | 2.39 | 2.83 | 41.00 | 0.27 | 0.05 | 8.80 | 95.10 | 0.31 | 75.90 | 0.05 | 1.00 | 0.84 | 0.02 | 0.09 | 2.00 | 1.70 | 0.52 | 0.01 | 118.00 |
| STANDARD DS3 | 2.65 | 2.42 | 2.87 | 41.00 | 0.27 | 0.05 | 8.60 | 93.20 | 0.31 | 80.90 | 0.05 | 1.00 | 0.84 | 0.02 | 0.09 | 2.00 | 1.40 | 0.53 | 0.02 | 117.00 |

Appendix 9. Quality control data, QPX and QPVX project, Bathurst Mining Camp, New Brunswick - (ICP-MS)

| SAMPLEID | Cd<br>ppm | Sb<br>ppm | Bi<br>ppm | V<br>ppm | Ca<br>% | P<br>% | La<br>ppm | Cr<br>ppm | Mg<br>% | Ba<br>ppm | Ti<br>% | B<br>ppm | Al<br>% | Na<br>% | K<br>% | W<br>ppm | Sc<br>ppm | Tl<br>ppm | S<br>% | Hg<br>ppb |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MP027003 FD | 0.47 | 0.18 | 0.88 | 136.00 | 0.15 | 0.12 | 15.90 | 57.60 | 0.41 | 97.10 | 0.10 | < 1 | 7.67 | 0.03 | 0.42 | < .1 | 6.10 | 0.08 | 0.06 | < 5 |
| MP027003 | 0.33 | 0.21 | 0.73 | 113.00 | 0.14 | 0.14 | 14.20 | 56.40 | 0.35 | 94.40 | 0.09 | 2.00 | 8.16 | 0.03 | 0.41 | < .1 | 6.20 | 0.14 | 0.07 | < 5 |
| MP027040 FD | 0.35 | 0.49 | 0.53 | 84.00 | 0.12 | 0.08 | 27.30 | 50.60 | 0.97 | 169.30 | 0.09 | 5.00 | 3.69 | 0.03 | 0.69 | < .1 | 5.70 | 0.26 | 0.04 | < 5 |
| MP027040 | 0.41 | 0.37 | 0.60 | 75.00 | 0.16 | 0.08 | 24.10 | 49.20 | 0.96 | 163.80 | 0.07 | 5.00 | 3.57 | 0.03 | 0.60 | < .1 | 5.40 | 0.15 | 0.05 | < 5 |
| MP027060 FD | 0.08 | 0.18 | 0.39 | 86.00 | 0.04 | 0.04 | 13.80 | 42.20 | 0.57 | 89.10 | 0.06 | < 1 | 3.67 | 0.02 | 0.50 | < .1 | 5.60 | 0.30 | 0.03 | < 5 |
| MP027060 | 0.05 | 0.17 | 0.35 | 66.00 | 0.03 | 0.03 | 12.50 | 33.00 | 0.43 | 79.70 | 0.05 | 1.00 | 2.32 | 0.02 | 0.49 | < .1 | 3.90 | 0.28 | 0.05 | < 5 |
| MP027072 FD | 0.13 | 0.24 | 0.29 | 75.00 | 0.04 | 0.08 | 22.40 | 42.80 | 0.65 | 127.70 | 0.06 | 3.00 | 3.96 | 0.03 | 0.60 | < .1 | 6.90 | 0.31 | 0.03 | < 5 |
| MP027072 | 0.12 | 0.13 | 0.27 | 73.00 | 0.03 | 0.08 | 20.80 | 39.60 | 0.52 | 116.80 | 0.04 | < 1 | 3.66 | 0.03 | 0.62 | < .1 | 6.40 | 0.33 | 0.03 | < 5 |
| MP027084 FD | 0.24 | 0.47 | 1.06 | 108.00 | 0.09 | 0.17 | 15.20 | 56.50 | 0.75 | 119.20 | 0.24 | 3.00 | 5.10 | 0.03 | 0.51 | 0.20 | 7.50 | 0.25 | 0.08 | < 5 |
| MP027084 | 0.27 | 0.67 | 1.07 | 119.00 | 0.11 | 0.19 | 18.10 | 64.40 | 0.76 | 134.30 | 0.27 | 2.00 | 5.40 | 0.03 | 0.62 | 0.20 | 8.20 | 0.16 | 0.08 | < 5 |
| MP027114 FD | 0.10 | 0.70 | 1.01 | 30.00 | 0.02 | 0.04 | 17.10 | 20.40 | 0.52 | 73.70 | 0.05 | 3.00 | 2.03 | 0.02 | 0.50 | < .1 | 2.90 | 0.27 | 0.01 | < 5 |
| MP027114 | 0.12 | 0.79 | 1.31 | 34.00 | 0.02 | 0.05 | 17.60 | 22.00 | 0.53 | 88.40 | 0.05 | < 1 | 2.16 | 0.02 | 0.60 | < .1 | 3.30 | 0.33 | < .01 | < 5 |
| MP027132 FD | 0.12 | 0.41 | 0.66 | 50.00 | 0.04 | 0.39 | 20.20 | 20.30 | 0.46 | 77.60 | 0.08 | < 1 | 5.76 | 0.02 | 0.56 | 0.10 | 6.50 | 0.21 | 0.05 | < 5 |
| MP027132 | 0.12 | 0.50 | 0.77 | 58.00 | 0.03 | 0.34 | 21.50 | 17.30 | 0.44 | 94.50 | 0.10 | 2.00 | 4.23 | 0.02 | 0.70 | 0.20 | 7.00 | 0.45 | 0.04 | < 5 |
| MP027153 FD | 0.11 | 0.84 | 0.69 | 106.00 | 0.03 | 0.54 | 19.60 | 36.40 | 0.45 | 93.10 | 0.07 | 2.00 | 3.27 | 0.02 | 0.67 | 0.10 | 4.20 | 0.23 | 0.03 | < 5 |
| MP027153 | 0.14 | 0.64 | 0.61 | 91.00 | 0.03 | 0.33 | 23.10 | 26.50 | 0.33 | 93.30 | 0.05 | < 1 | 2.63 | 0.02 | 0.62 | < .1 | 4.60 | 0.40 | 0.04 | < 5 |
| MP027167 FD | 0.11 | 1.10 | 1.14 | 124.00 | 0.09 | 0.26 | 16.50 | 54.10 | 0.49 | 154.40 | 0.15 | 1.00 | 3.58 | 0.03 | 0.89 | 0.10 | 4.60 | 0.25 | 0.03 | < 5 |
| MP027167 | 0.16 | 0.84 | 0.84 | 80.00 | 0.08 | 0.15 | 21.80 | 36.30 | 0.42 | 131.90 | 0.07 | 3.00 | 2.75 | 0.02 | 0.71 | < .1 | 3.70 | 0.23 | 0.01 | < 5 |
| MP027123 LD | 0.07 | 0.55 | 1.48 | 63.00 | 0.03 | 0.25 | 13.80 | 7.20 | 0.46 | 71.90 | 0.10 | 1.00 | 2.32 | 0.02 | 0.53 | < .1 | 7.10 | 0.33 | 0.01 | 5.00 |
| MP027123 | 0.08 | 0.59 | 1.64 | 67.00 | 0.03 | 0.27 | 14.80 | 8.10 | 0.47 | 73.90 | 0.11 | < 1 | 2.47 | 0.02 | 0.56 | < .1 | 8.20 | 0.36 | 0.03 | < 5 |
| MP027133 LD | 0.14 | 0.42 | 0.61 | 44.00 | 0.02 | 0.15 | 18.60 | 13.50 | 0.31 | 96.60 | 0.05 | < 1 | 3.66 | 0.02 | 0.69 | < .1 | 6.50 | 0.37 | 0.02 | < 5 |
| MP027133 | 0.15 | 0.47 | 0.60 | 45.00 | 0.02 | 0.16 | 17.80 | 12.50 | 0.29 | 94.50 | 0.05 | 3.00 | 3.62 | 0.02 | 0.64 | < .1 | 6.50 | 0.34 | 0.05 | < 5 |
| MP027158 LD | 0.08 | 0.58 | 0.97 | 69.00 | 0.05 | 0.26 | 21.10 | 39.60 | 0.58 | 115.60 | 0.02 | 1.00 | 3.61 | 0.02 | 0.76 | < .1 | 4.20 | 0.28 | 0.05 | < 5 |
| MP027158 | 0.10 | 0.56 | 0.97 | 74.00 | 0.05 | 0.27 | 22.00 | 40.30 | 0.63 | 134.70 | 0.03 | < 1 | 3.79 | 0.03 | 0.82 | < .1 | 5.20 | 0.32 | 0.04 | < 5 |
| MP027169 LD | 0.15 | 0.50 | 0.49 | 52.00 | 0.03 | 0.13 | 26.10 | 22.30 | 0.33 | 115.50 | 0.03 | < 1 | 2.50 | 0.03 | 0.63 | < .1 | 4.20 | 0.39 | < .01 | < 5 |
| MP027169 | 0.14 | 0.46 | 0.43 | 50.00 | 0.03 | 0.13 | 20.60 | 20.40 | 0.31 | 92.80 | 0.03 | 1.00 | 2.35 | 0.02 | 0.54 | < .1 | 3.60 | 0.37 | 0.02 | < 5 |
| MP027120 | 0.04 | 0.32 | 0.89 | 22.00 | 0.02 | 0.05 | 12.90 | 1.40 | 0.24 | 64.70 | 0.06 | < 1 | 1.02 | 0.01 | 0.45 | < .1 | 4.40 | 0.38 | < .01 | < 5 |
| RE MP027120 | 0.03 | 0.32 | 0.87 | 22.00 | 0.02 | 0.05 | 12.80 | 1.30 | 0.25 | 62.00 | 0.06 | < 1 | 1.06 | 0.01 | 0.47 | < .1 | 4.60 | 0.38 | < .01 | < 5 |
| MP027150 | 0.07 | 0.67 | 0.54 | 72.00 | 0.05 | 0.09 | 21.20 | 22.00 | 0.27 | 89.90 | 0.06 | < 1 | 2.28 | 0.02 | 0.50 | < .1 | 3.90 | 0.42 | 0.01 | < 5 |
| RE MP027150 | 0.08 | 0.69 | 0.58 | 74.00 | 0.05 | 0.09 | 21.60 | 24.10 | 0.28 | 88.60 | 0.08 | < 1 | 2.35 | 0.02 | 0.52 | < .1 | 4.00 | 0.43 | 0.03 | < 5 |
| MP027170 | 0.18 | 0.76 | 0.60 | 77.00 | 0.03 | 0.22 | 19.50 | 29.80 | 0.44 | 97.10 | 0.05 | 3.00 | 3.17 | 0.03 | 0.61 | < .1 | 4.10 | 0.36 | 0.03 | < 5 |
| RE MP027170 | 0.16 | 0.86 | 0.59 | 73.00 | 0.03 | 0.20 | 17.60 | 28.90 | 0.42 | 89.60 | 0.05 | 2.00 | 2.99 | 0.02 | 0.56 | 0.10 | 3.70 | 0.39 | 0.03 | < 5 |
| MP027195 FD | 9.07 | 26.94 | 9.18 | 51.00 | 15.41 | 0.43 | 11.10 | 22.20 | 0.50 | 149.20 | 0.02 | 60.00 | 1.43 | 0.05 | 0.98 | 0.30 | 2.60 | 4.87 | 2.47 | 12.00 |
| MP027195 | 16.61 | 25.16 | 8.34 | 43.00 | 16.78 | 0.45 | 11.20 | 31.80 | 0.56 | 191.30 | 0.02 | 80.00 | 1.44 | 0.05 | 0.98 | 0.30 | 2.10 | 4.12 | 1.73 | 5.00 |
| MP027187 LD | 19.30 | 16.66 | 6.22 | 42.00 | 17.90 | 0.53 | 9.00 | 21.90 | 0.66 | 331.70 | 0.02 | 96.00 | 1.20 | 0.05 | 1.49 | 0.20 | 2.30 | 4.38 | 1.46 | 11.00 |
| MP027187 | 18.52 | 16.90 | 5.95 | 44.00 | 17.50 | 0.55 | 8.10 | 20.10 | 0.69 | 218.40 | 0.02 | 108.00 | 1.14 | 0.05 | 1.56 | 0.20 | 2.10 | 4.09 | 1.60 | 7.00 |
| MP027190 | 12.19 | 8.64 | 2.38 | 15.00 | 26.73 | 0.52 | 3.40 | 10.10 | 0.89 | 278.50 | 0.01 | 117.00 | 0.42 | 0.05 | 2.35 | 0.10 | 1.10 | 1.63 | 1.02 | < 5 |
| RE MP027190 | 10.29 | 8.30 | 2.22 | 15.00 | 27.99 | 0.52 | 3.20 | 10.00 | 0.90 | 330.50 | 0.01 | 118.00 | 0.40 | 0.05 | 2.25 | 0.20 | 1.20 | 1.58 | 0.98 | 5.00 |
| STANDARD DS4 | 5.38 | 5.13 | 5.28 | 78.00 | 0.55 | 0.09 | 16.80 | 165.20 | 0.59 | 140.90 | 0.09 | 1.00 | 1.75 | 0.03 | 0.16 | 3.80 | 3.80 | 1.04 | 0.07 | 287.00 |
| STANDARD DS4 | 5.08 | 4.90 | 4.96 | 76.00 | 0.53 | 0.09 | 17.50 | 164.10 | 0.59 | 145.60 | 0.09 | 2.00 | 1.71 | 0.03 | 0.16 | 3.70 | 3.90 | 1.05 | 0.05 | 276.00 |
| STANDARD DS4 | 5.29 | 4.80 | 5.14 | 74.00 | 0.54 | 0.09 | 16.90 | 173.60 | 0.59 | 154.30 | 0.09 | 2.00 | 1.76 | 0.03 | 0.17 | 3.80 | 3.60 | 0.99 | 0.05 | 266.00 |
| STANDARD DS4 | 5.30 | 4.95 | 5.23 | 74.00 | 0.51 | 0.09 | 17.50 | 165.50 | 0.59 | 140.90 | 0.10 | 2.00 | 1.70 | 0.03 | 0.16 | 3.90 | 3.90 | 1.17 | 0.05 | 260.00 |

Appendix 9. Quality control data, QPX and QPVX project, Bathurst Mining Camp, New Brunswick - (ICP-MS)

| SAMPLEID | Se ppm | Te ppm | Ga ppm | Sn ppm | Zr ppm | In ppm |
|---|---|---|---|---|---|---|
| MP015001 | 0.10 | < .02 | 11.10 | 2.00 | 5.90 | 0.04 |
| MP015001 FD | 0.20 | < .02 | 12.00 | 2.20 | 5.10 | 0.05 |
| MP015015 | 0.20 | < .02 | 12.40 | 2.80 | 6.90 | 0.07 |
| MP015015 FD | 0.20 | < .02 | 13.70 | 3.00 | 5.50 | 0.07 |
| MP015029 | 0.40 | < .02 | 11.20 | 2.10 | 2.30 | 0.06 |
| MP015029 FD | 0.40 | < .02 | 11.70 | 2.20 | 3.40 | 0.06 |
| MP015045 | 0.20 | < .02 | 8.10 | 1.60 | 6.80 | 0.06 |
| MP015045 FD | 0.40 | 0.02 | 9.10 | 2.00 | 7.30 | 0.07 |
| MP015073 | 0.20 | < .02 | 11.70 | 2.90 | 3.20 | 0.05 |
| MP015073 FD | 0.10 | < .02 | 12.60 | 3.50 | 3.10 | 0.04 |
| MP015085 | 0.30 | 0.02 | 8.60 | 2.10 | 1.80 | 0.06 |
| MP015085 FD | 0.20 | < .02 | 10.30 | 2.70 | 2.50 | 0.04 |
| MP015097 | 0.30 | < .02 | 13.30 | 3.10 | 2.70 | 0.05 |
| MP015097 FD | 0.30 | < .02 | 13.20 | 2.90 | 4.00 | 0.05 |
| RE MP015018 | 0.40 | < .02 | 8.10 | 1.90 | 7.10 | 0.08 |
| MP015040 | < .1 | < .02 | 5.30 | 1.50 | 6.90 | 0.04 |
| RE MP015040 | 0.10 | < .02 | 5.50 | 1.50 | 6.60 | 0.05 |
| RE MP015078 | 0.20 | < .02 | 6.40 | 1.10 | 4.20 | 0.04 |
| MP015078 | 0.40 | 0.03 | 5.90 | 1.10 | 4.20 | 0.04 |
| MP015096 | 0.20 | < .02 | 14.70 | 4.00 | 4.10 | 0.07 |
| RE MP015096 | 0.30 | < .02 | 14.40 | 4.40 | 4.20 | 0.08 |
| MP015018 LD | 0.40 | < .02 | 8.70 | 1.90 | 5.90 | 0.07 |
| MP015018 | 0.30 | < .02 | 8.30 | 1.80 | 6.40 | 0.07 |
| MP015038 LD | 0.20 | < .02 | 7.10 | 1.40 | 5.00 | 0.06 |
| MP015038 | 0.20 | 0.02 | 7.00 | 1.40 | 4.90 | 0.06 |
| MP015060 LD | 0.40 | < .02 | 19.70 | 4.70 | 2.90 | 0.06 |
| MP015060 | 0.30 | < .02 | 19.30 | 4.70 | 3.20 | 0.07 |
| MP015081 LD | 0.30 | < .02 | 7.20 | 1.70 | 3.90 | 0.04 |
| MP015081 | 0.40 | < .02 | 8.30 | 1.60 | 4.00 | 0.04 |
| MP015097 LD | 0.30 | < .02 | 13.70 | 3.00 | 4.30 | 0.06 |
| MP015097 | 0.30 | < .02 | 13.30 | 3.10 | 2.70 | 0.05 |
| MP016018 FD | 0.50 | < .02 | 11.00 | 2.80 | 4.20 | 0.04 |
| MP016018 | 0.40 | < .02 | 12.50 | 3.70 | 3.60 | 0.04 |
| MP016006 FD | 0.30 | < .02 | 9.90 | 2.90 | 4.30 | 0.04 |
| MP016006 | < .1 | < .02 | 7.60 | 2.00 | 3.20 | 0.03 |
| MP016040 FD | 0.60 | < .02 | 13.70 | 3.50 | 5.30 | 0.06 |
| MP016040 | 0.60 | 0.02 | 15.60 | 3.90 | 5.60 | 0.07 |
| MP016046 FD | 0.60 | < .02 | 7.10 | 1.90 | 6.60 | 0.05 |
| MP016046 | 0.60 | < .02 | 9.40 | 2.50 | 6.90 | 0.08 |
| MP016081 | 0.10 | < .02 | 8.20 | 1.40 | 6.80 | 0.04 |
| MP016081 FD | 0.10 | < .02 | 6.40 | 1.40 | 7.00 | 0.04 |
| MP016019 LD | 0.50 | < .02 | 7.40 | 2.00 | 5.00 | 0.04 |
| MP016019 | 0.50 | 0.02 | 8.00 | 2.50 | 5.60 | 0.05 |
| MP016025 LD | 0.50 | < .02 | 6.90 | 1.70 | 7.90 | 0.05 |
| MP016025 | 0.60 | < .02 | 5.90 | 1.70 | 7.30 | 0.06 |
| MP016060 LD | 0.10 | < .02 | 8.50 | 2.10 | 6.10 | 0.04 |
| MP016060 | 0.30 | < .02 | 8.60 | 2.50 | 6.30 | 0.05 |
| MP016083 LD | 0.10 | < .02 | 5.80 | 1.20 | 6.80 | 0.04 |
| MP016083 | 0.10 | < .02 | 6.60 | 1.10 | 7.90 | 0.03 |
| MP016101 LD | 0.30 | < .02 | 6.10 | 1.90 | 8.80 | 0.07 |
| MP016101 | 0.40 | < .02 | 7.10 | 2.10 | 9.60 | 0.08 |
| MP016113 LD | 0.10 | < .02 | 6.10 | 1.90 | 3.10 | 0.05 |
| MP016113 | 0.30 | < .02 | 7.20 | 1.80 | 3.50 | 0.06 |
| MP016014 | 0.40 | < .02 | 8.50 | 3.20 | 8.40 | 0.06 |
| RE MP016014 | 0.40 | < .02 | 7.10 | 3.30 | 7.60 | 0.04 |
| MP016048 | 0.10 | < .02 | 8.60 | 1.80 | 5.30 | 0.04 |
| RE MP016048 | 0.10 | < .02 | 8.40 | 2.30 | 4.80 | 0.04 |
| MP016070 | 0.10 | < .02 | 6.80 | 1.70 | 7.70 | 0.09 |
| RE MP016070 | 0.10 | < .02 | 7.60 | 1.90 | 7.50 | 0.11 |
| MP016104 | 0.20 | < .02 | 8.40 | 2.60 | 8.20 | 0.07 |
| RE MP016104 | 0.20 | < .02 | 9.20 | 2.60 | 9.80 | 0.06 |
| STANDARD DS3 | 0.70 | 0.53 | 2.90 | 3.50 | 1.30 | 1.05 |
| STANDARD DS3 | 0.60 | 0.58 | 3.10 | 3.20 | 1.40 | 1.10 |
| STANDARD DS3 | 0.60 | 0.53 | 3.00 | 3.40 | 1.40 | 1.08 |
| STANDARD DS3 | 0.60 | 0.57 | 3.30 | 3.30 | 1.60 | 1.00 |
| STANDARD DS3 | 0.60 | 0.55 | 3.30 | 3.70 | 1.50 | 1.06 |
| STANDARD DS3 | 0.70 | 0.55 | 3.30 | 3.70 | 1.50 | 1.13 |
| STANDARD DS3 | 0.60 | 0.54 | 3.20 | 3.50 | 1.50 | 1.05 |

Appendix 9. Quality control data, QPX and QPVX project, Bathurst Mining Camp, New Brunswick - (ICP-MS)

| SAMPLEID | Se<br>ppm | Te<br>ppm | Ga<br>ppm | Sn<br>ppm | Zr<br>ppm | In<br>ppm |
|---|---|---|---|---|---|---|
| MP027003 FD | 0.80 | < .02 | 35.10 | | | |
| MP027003 | 0.50 | < .02 | 26.20 | | | |
| MP027040 FD | 0.40 | < .02 | 13.40 | | | |
| MP027040 | 0.30 | < .02 | 13.00 | | | |
| MP027060 FD | 0.20 | 0.02 | 16.80 | | | |
| MP027060 | 0.20 | < .02 | 14.30 | | | |
| MP027072 FD | 0.40 | 0.02 | 15.20 | | | |
| MP027072 | 0.30 | < .02 | 16.20 | | | |
| MP027084 FD | 0.50 | 0.03 | 25.50 | | | |
| MP027084 | 0.60 | 0.05 | 29.10 | | | |
| MP027114 FD | 0.20 | < .02 | 8.00 | | | |
| MP027114 | 0.20 | 0.02 | 9.70 | | | |
| MP027132 FD | 1.00 | 0.04 | 13.40 | | | |
| MP027132 | 0.60 | 0.03 | 18.30 | | | |
| MP027153 FD | 0.40 | 0.04 | 17.70 | | | |
| MP027153 | 0.20 | < .02 | 15.30 | | | |
| MP027167 FD | 0.30 | 0.03 | 21.80 | | | |
| MP027167 | 0.30 | < .02 | 15.20 | | | |
| MP027123 LD | 0.10 | 0.02 | 14.10 | | | |
| MP027123 | 0.30 | 0.03 | 15.60 | | | |
| MP027133 LD | 0.30 | < .02 | 13.10 | | | |
| MP027133 | 0.50 | 0.03 | 12.50 | | | |
| MP027158 LD | 0.30 | 0.02 | 16.40 | | | |
| MP027158 | 0.30 | < .02 | 17.00 | | | |
| MP027169 LD | 0.20 | < .02 | 13.40 | | | |
| MP027169 | < .1 | < .02 | 12.40 | | | |
| MP027120 | < .1 | < .02 | 8.60 | | | |
| RE MP027120 | < .1 | 0.02 | 8.50 | | | |
| MP027150 | < .1 | 0.02 | 12.40 | | | |
| RE MP027150 | < .1 | 0.02 | 13.10 | | | |
| MP027170 | 0.40 | 0.03 | 16.00 | | | |
| RE MP027170 | 0.30 | 0.02 | 15.10 | | | |
| MP027195 FD | 1.40 | 0.08 | 4.40 | | | |
| MP027195 | 1.50 | 0.08 | 4.10 | | | |
| MP027187 LD | 1.20 | 0.09 | 4.20 | | | |
| MP027187 | 1.30 | 0.11 | 4.00 | | | |
| MP027190 | 0.70 | 0.14 | 1.60 | | | |
| RE MP027190 | 0.50 | 0.24 | 1.70 | | | |
| | | | | | | |
| STANDARD DS4 | 1.40 | 0.71 | 6.60 | | | |
| STANDARD DS4 | 1.30 | 0.72 | 6.20 | | | |
| STANDARD DS4 | 1.30 | 0.75 | 6.60 | | | |
| STANDARD DS4 | 1.30 | 0.75 | 6.00 | | | |

Appendix 10. Co-ordinates (UTM NAD 83) for QPX B-horizon soil and QPVX bark sample locations, Bathurst Mining Camp, New Brunswick

| SAMPLEID | Zone | Sampling Area | NTS | Easting | Northing |
|---|---|---|---|---|---|
| MP015001 | 20 | Transect 5000 | 21 P/5 | 732197 | 5240796 |
| MP015002 | 20 | Transect 5000 | 21 P/5 | 732109 | 5240844 |
| MP015003 | 20 | Transect 5000 | 21 P/5 | 732024 | 5240886 |
| MP015004 | 20 | Transect 5000 | 21 P/5 | 731938 | 5240928 |
| MP015005 | 20 | Transect 5000 | 21 P/5 | 731852 | 5240972 |
| MP015006 | 20 | Transect 5000 | 21 P/5 | 731765 | 5241015 |
| MP015007 | 20 | Transect 5000 | 21 P/5 | 732292 | 5240755 |
| MP015008 | 20 | Transect 5000 | 21 P/5 | 732406 | 5240718 |
| MP015009 | 20 | Transect 5000 | 21 P/5 | 732455 | 5240659 |
| MP015010 | 20 | Transect 5000 | 21 P/5 | 732533 | 5240629 |
| MP015011 | 20 | Transect 5000 | 21 P/5 | 732622 | 5240590 |
| MP015012 | 20 | Transect 5000 | 21 P/5 | 732725 | 5240542 |
| MP015013 | 20 | Transect 5000 | 21 P/5 | 732818 | 5240524 |
| MP015014 | 20 | Transect 5000 | 21 P/5 | 732899 | 5240464 |
| MP015015 | 20 | Transect 5000 | 21 P/5 | 733009 | 5240393 |
| MP015016 | 20 | Transect 5000 | 21 P/5 | 733093 | 5240327 |
| MP015017 | 20 | Transect 5000 | 21 P/5 | 733230 | 5240317 |
| MP015018 | 20 | Transect 5000 | 21 P/5 | 733296 | 5240249 |
| MP015019 | 20 | Transect 5000 | 21 P/5 | 733391 | 5240204 |
| MP015020 | 20 | Transect 5000 | 21 P/5 | 733487 | 5240227 |
| MP015021 | 20 | Transect 5000 | 21 P/5 | 733562 | 5240135 |
| MP015022 | 20 | Transect 5000 | 21 P/5 | 733641 | 5240089 |
| MP015023 | 20 | Transect 5000 | 21 P/5 | 733738 | 5240108 |
| MP015024 | 20 | Transect 5000 | 21 P/5 | 733849 | 5240082 |
| MP015025 | 20 | Transect 5000 | 21 P/5 | 733946 | 5240104 |
| MP015026 | 20 | Transect 5000 | 21 P/5 | 734045 | 5240116 |
| MP015027 | 20 | Transect 5000 | 21 P/5 | 734136 | 5240140 |
| MP015028 | 20 | Transect 5000 | 21 P/5 | 734241 | 5240116 |
| MP015029 | 20 | Transect 5000 | 21 P/5 | 734343 | 5240117 |
| MP015030 | 20 | Transect 5000 | 21 P/5 | 734467 | 5240155 |
| MP015031 | 20 | Transect 5000 | 21 P/5 | 734622 | 5240388 |
| MP015032 | 20 | Transect 5000 | 21 P/5 | 735818 | 5239972 |
| MP015033 | 20 | Transect 5000 | 21 P/5 | 735919 | 5239963 |
| MP015034 | 20 | Transect 5000 | 21 P/5 | 736012 | 5239916 |
| MP015035 | 20 | Transect 5000 | 21 P/5 | 736104 | 5239899 |
| MP015036 | 20 | Transect 5000 | 21 P/5 | 736194 | 5239869 |
| MP015037 | 20 | Transect 5000 | 21 P/5 | 736294 | 5239835 |
| MP015038 | 20 | Transect 5000 | 21 P/5 | 736385 | 5239833 |
| MP015039 | 20 | Transect 5000 | 21 P/5 | 736487 | 5239824 |
| MP015040 | 20 | Transect 5000 | 21 P/5 | 736585 | 5239804 |
| MP015041 | 20 | Transect 5000 | 21 P/5 | 736693 | 5239861 |
| MP015042 | 20 | Transect 5000 | 21 P/5 | 736777 | 5239800 |
| MP015043 | 20 | Transect 5000 | 21 P/5 | 736863 | 5239779 |
| MP015044 | 20 | Transect 5000 | 21 P/5 | 736964 | 5239701 |
| MP015045 | 20 | Transect 5000 | 21 P/5 | 737042 | 5239626 |
| MP015046 | 20 | Transect 5000 | 21 P/5 | 737128 | 5239582 |
| MP015047 | 20 | Transect 5000 | 21 P/5 | 737264 | 5239465 |
| MP015048 | 20 | Transect 5000 | 21 P/5 | 737433 | 5239415 |
| MP015049 | 20 | Transect 5000 | 21 P/5 | 737540 | 5239389 |
| MP015050 | 20 | Transect 5000 | 21 P/5 | 737623 | 5239348 |
| MP015051 | 20 | Transect 5000 | 21 P/5 | 737703 | 5239294 |
| MP015052 | 20 | Transect 5000 | 21 P/5 | 737824 | 5239254 |
| MP015053 | 20 | Transect 5000 | 21 P/5 | 737913 | 5239226 |
| MP015054 | 20 | Transect 5000 | 21 P/5 | 738007 | 5239169 |
| MP015055 | 20 | Transect 5000 | 21 P/5 | 738105 | 5239162 |
| MP015056 | 20 | Transect 5000 | 21 P/5 | 738203 | 5239116 |
| MP015057 | 20 | Transect 5000 | 21 P/5 | 738285 | 5239085 |
| MP015058 | 20 | Transect 5000 | 21 P/5 | 738393 | 5239034 |
| MP015059 | 20 | Transect 5000 | 21 P/5 | 738491 | 5239001 |
| MP015060 | 20 | Transect 5000 | 21 P/5 | 738587 | 5238964 |
| MP015061 | 20 | Transect 5000 | 21 P/5 | 738681 | 5238931 |
| MP015062 | 20 | Transect 5000 | 21 P/5 | 738777 | 5238911 |
| MP015063 | 20 | Transect 5000 | 21 P/5 | 738859 | 5238878 |
| MP015064 | 20 | Transect 5000 | 21 P/5 | 738958 | 5238852 |
| MP015065 | 20 | Transect 5000 | 21 P/5 | 739061 | 5238820 |
| MP015066 | 20 | Transect 5000 | 21 P/5 | 739168 | 5238813 |
| MP015067 | 20 | Transect 5000 | 21 P/5 | 739255 | 5238767 |
| MP015068 | 20 | Transect 5000 | 21 P/5 | 739342 | 5238747 |
| MP015069 | 20 | Transect 5000 | 21 P/5 | 739440 | 5238728 |
| MP015070 | 20 | Transect 5000 | 21 P/5 | 739534 | 5238707 |
| MP015071 | 20 | Transect 5000 | 21 P/5 | 739640 | 5238666 |
| MP015072 | 20 | Transect 5000 | 21 P/5 | 739738 | 5238640 |

## Appendix 10. Co-ordinates (UTM NAD 83) for QPX B-horizon soil and QPVX bark sample locations, Bathurst Mining Camp, New Brunswick

| SAMPLEID | Zone | Sampling Area | NTS | Easting | Northing |
|---|---|---|---|---|---|
| MP015073 | 20 | Transect 5000 | 21 P/5 | 739835 | 5238611 |
| MP015074 | 20 | Transect 5000 | 21 P/5 | 739941 | 5238581 |
| MP015075 | 20 | Transect 5000 | 21 P/5 | 740079 | 5238655 |
| MP015076 | 20 | Transect 5000 | 21 P/5 | 740151 | 5238605 |
| MP015077 | 20 | Transect 5000 | 21 P/5 | 740234 | 5238530 |
| MP015078 | 20 | Transect 5000 | 21 P/5 | 740263 | 5238453 |
| MP015079 | 20 | Transect 5000 | 21 P/5 | 740348 | 5238364 |
| MP015080 | 20 | Transect 5000 | 21 P/5 | 740489 | 5238361 |
| MP015081 | 20 | Transect 5000 | 21 P/5 | 740572 | 5238343 |
| MP015082 | 20 | Transect 5000 | 21 P/5 | 740660 | 5238316 |
| MP015083 | 20 | Transect 5000 | 21 P/5 | 740761 | 5238287 |
| MP015084 | 20 | Transect 5000 | 21 P/5 | 740855 | 5238257 |
| MP015085 | 20 | Transect 5000 | 21 P/5 | 740950 | 5238218 |
| MP015086 | 20 | Transect 5000 | 21 P/5 | 741051 | 5238188 |
| MP015087 | 20 | Transect 5000 | 21 P/5 | 741157 | 5238164 |
| MP015088 | 20 | Transect 5000 | 21 P/5 | 741244 | 5238138 |
| MP015089 | 20 | Transect 5000 | 21 P/5 | 741371 | 5238115 |
| MP015090 | 20 | Transect 5000 | 21 P/5 | 741486 | 5238076 |
| MP015091 | 20 | Transect 5000 | 21 P/5 | 741600 | 5238059 |
| MP015092 | 20 | Transect 5000 | 21 P/5 | 734726 | 5240334 |
| MP015093 | 20 | Transect 5000 | 21 P/5 | 734793 | 5240274 |
| MP015094 | 20 | Transect 5000 | 21 P/5 | 734862 | 5240246 |
| MP015095 | 20 | Transect 5000 | 21 P/5 | 735039 | 5240177 |
| MP015096 | 20 | Transect 5000 | 21 P/5 | 735140 | 5240151 |
| MP015097 | 20 | Transect 5000 | 21 P/5 | 735226 | 5240139 |
| MP015098 | 20 | Transect 5000 | 21 P/5 | 735326 | 5240068 |
| MP015099 | 20 | Transect 5000 | 21 P/5 | 735404 | 5240016 |
| MP015100 | 20 | Transect 5000 | 21 P/5 | 735503 | 5239962 |
| MP015101 | 20 | Transect 5000 | 21 P/5 | 735565 | 5239930 |
| MP015102 | 20 | Transect 5000 | 21 P/5 | 735703 | 5239924 |
| MP016001 | 20 | Transect 6000 | 21 P/5 | 739667 | 5242612 |
| MP016002 | 20 | Transect 6000 | 21 P/5 | 739761 | 5242583 |
| MP016003 | 20 | Transect 6000 | 21 P/5 | 739834 | 5242472 |
| MP016004 | 20 | Transect 6000 | 21 P/5 | 739937 | 5242464 |
| MP016005 | 20 | Transect 6000 | 21 P/5 | 740040 | 5242427 |
| MP016006 | 20 | Transect 6000 | 21 P/5 | 740135 | 5242398 |
| MP016007 | 20 | Transect 6000 | 21 P/5 | 740234 | 5242353 |
| MP016008 | 20 | Transect 6000 | 21 P/5 | 740325 | 5242340 |
| MP016009 | 20 | Transect 6000 | 21 P/5 | 740424 | 5242302 |
| MP016010 | 20 | Transect 6000 | 21 P/5 | 740519 | 5242274 |
| MP016011 | 20 | Transect 6000 | 21 P/5 | 740735 | 5242188 |
| MP016012 | 20 | Transect 6000 | 21 P/5 | 740833 | 5242168 |
| MP016013 | 20 | Transect 6000 | 21 P/5 | 736669 | 5243757 |
| MP016014 | 20 | Transect 6000 | 21 P/5 | 736799 | 5243743 |
| MP016015 | 20 | Transect 6000 | 21 P/5 | 736877 | 5243642 |
| MP016016 | 20 | Transect 6000 | 21 P/5 | 736947 | 5243580 |
| MP016017 | 20 | Transect 6000 | 21 P/5 | 737058 | 5243522 |
| MP016018 | 20 | Transect 6000 | 21 P/5 | 737175 | 5243511 |
| MP016019 | 20 | Transect 6000 | 21 P/5 | 737227 | 5243419 |
| MP016020 | 20 | Transect 6000 | 21 P/5 | 737439 | 5243429 |
| MP016021 | 20 | Transect 6000 | 21 P/5 | 737553 | 5243394 |
| MP016022 | 20 | Transect 6000 | 21 P/5 | 737670 | 5243364 |
| MP016023 | 20 | Transect 6000 | 21 P/5 | 737767 | 5243339 |
| MP016024 | 20 | Transect 6000 | 21 P/5 | 737858 | 5243310 |
| MP016025 | 20 | Transect 6000 | 21 P/5 | 737953 | 5243266 |
| MP016026 | 20 | Transect 6000 | 21 P/5 | 738062 | 5243240 |
| MP016027 | 20 | Transect 6000 | 21 P/5 | 738173 | 5243209 |
| MP016028 | 20 | Transect 6000 | 21 P/5 | 738268 | 5243165 |
| MP016029 | 20 | Transect 6000 | 21 P/5 | 738372 | 5243142 |
| MP016030 | 20 | Transect 6000 | 21 P/5 | 738475 | 5243118 |
| MP016031 | 20 | Transect 6000 | 21 P/5 | 738558 | 5243074 |
| MP016032 | 20 | Transect 6000 | 21 P/5 | 738649 | 5243052 |
| MP016033 | 20 | Transect 6000 | 21 P/5 | 738752 | 5243022 |
| MP016034 | 20 | Transect 6000 | 21 P/5 | 738859 | 5242985 |
| MP016035 | 20 | Transect 6000 | 21 P/5 | 738975 | 5242941 |
| MP016036 | 20 | Transect 6000 | 21 P/5 | 739136 | 5242891 |
| MP016037 | 20 | Transect 6000 | 21 P/5 | 739254 | 5242847 |
| MP016038 | 20 | Transect 6000 | 21 P/5 | 739373 | 5242826 |
| MP016039 | 20 | Transect 6000 | 21 P/5 | 739514 | 5242622 |
| MP016040 | 20 | Transect 6000 | 21 P/5 | 739567 | 5242697 |
| MP016041 | 20 | Transect 6000 | 21 P/5 | 736589 | 5243783 |
| MP016042 | 20 | Transect 6000 | 21 P/5 | 736485 | 5243765 |

Appendix 10. Co-ordinates (UTM NAD 83) for QPX B-horizon soil and QPVX bark sample locations, Bathurst Mining Camp, New Brunswick

| SAMPLEID | Zone | Sampling Area | NTS | Easting | Northing |
|---|---|---|---|---|---|
| MP016043 | 20 | Transect 6000 | 21 P/5 | 736387 | 5243723 |
| MP016044 | 20 | Transect 6000 | 21 P/5 | 736297 | 5243667 |
| MP016045 | 20 | Transect 6000 | 21 P/5 | 736192 | 5243668 |
| MP016046 | 20 | Transect 6000 | 21 P/5 | 736082 | 5243897 |
| MP016047 | 20 | Transect 6000 | 21 P/5 | 735975 | 5243943 |
| MP016048 | 20 | Transect 6000 | 21 P/5 | 735862 | 5244032 |
| MP016049 | 20 | Transect 6000 | 21 P/5 | 735742 | 5244044 |
| MP016050 | 20 | Transect 6000 | 21 P/5 | 735659 | 5244165 |
| MP016051 | 20 | Transect 6000 | 21 P/5 | 735501 | 5244281 |
| MP016052 | 20 | Transect 6000 | 21 P/5 | 735402 | 5244347 |
| MP016053 | 20 | Transect 6000 | 21 P/5 | 735237 | 5244413 |
| MP016054 | 20 | Transect 6000 | 21 P/5 | 735141 | 5244425 |
| MP016055 | 20 | Transect 6000 | 21 P/5 | 735023 | 5244453 |
| MP016056 | 20 | Transect 6000 | 21 P/5 | 734918 | 5244527 |
| MP016057 | 20 | Transect 6000 | 21 P/5 | 734774 | 5244575 |
| MP016058 | 20 | Transect 6000 | 21 P/5 | 734643 | 5244615 |
| MP016059 | 20 | Transect 6000 | 21 P/5 | 734542 | 5244642 |
| MP016060 | 20 | Transect 6000 | 21 P/5 | 734368 | 5244693 |
| MP016061 | 20 | Transect 6000 | 21 P/5 | 734245 | 5244702 |
| MP016062 | 20 | Transect 6000 | 21 P/5 | 734176 | 5244735 |
| MP016063 | 20 | Transect 6000 | 21 P/5 | 734071 | 5244756 |
| MP016064 | 20 | Transect 6000 | 21 P/5 | 733955 | 5244784 |
| MP016065 | 20 | Transect 6000 | 21 P/5 | 733833 | 5244774 |
| MP016066 | 20 | Transect 6000 | 21 P/5 | 733731 | 5244820 |
| MP016067 | 20 | Transect 6000 | 21 P/5 | 733660 | 5245008 |
| MP016068 | 20 | Transect 6000 | 21 P/5 | 733551 | 5245140 |
| MP016069 | 20 | Transect 6000 | 21 P/5 | 731233 | 5245726 |
| MP016070 | 20 | Transect 6000 | 21 P/5 | 731381 | 5245736 |
| MP016071 | 20 | Transect 6000 | 21 P/5 | 731487 | 5245731 |
| MP016072 | 20 | Transect 6000 | 21 P/5 | 731572 | 5245694 |
| MP016073 | 20 | Transect 6000 | 21 P/5 | 731650 | 5245660 |
| MP016074 | 20 | Transect 6000 | 21 P/5 | 731769 | 5245620 |
| MP016075 | 20 | Transect 6000 | 21 P/5 | 731855 | 5245596 |
| MP016076 | 20 | Transect 6000 | 21 P/5 | 731937 | 5245648 |
| MP016077 | 20 | Transect 6000 | 21 P/5 | 732045 | 5245514 |
| MP016078 | 20 | Transect 6000 | 21 P/5 | 732086 | 5245359 |
| MP016079 | 20 | Transect 6000 | 21 P/5 | 732163 | 5245321 |
| MP016080 | 20 | Transect 6000 | 21 P/5 | 732252 | 5245269 |
| MP016081 | 20 | Transect 6000 | 21 P/5 | 732359 | 5245246 |
| MP016082 | 20 | Transect 6000 | 21 P/5 | 732444 | 5245215 |
| MP016083 | 20 | Transect 6000 | 21 P/5 | 732540 | 5245167 |
| MP016084 | 20 | Transect 6000 | 21 P/5 | 732623 | 5245150 |
| MP016085 | 20 | Transect 6000 | 21 P/5 | 732722 | 5245078 |
| MP016086 | 20 | Transect 6000 | 21 P/5 | 732832 | 5245077 |
| MP016087 | 20 | Transect 6000 | 21 P/5 | 732961 | 5245051 |
| MP016088 | 20 | Transect 6000 | 21 P/5 | 733088 | 5245005 |
| MP016089 | 20 | Transect 6000 | 21 P/5 | 733206 | 5244962 |
| MP016090 | 20 | Transect 6000 | 21 P/5 | 733337 | 5244983 |
| MP016091 | 20 | Transect 6000 | 21 P/5 | 733426 | 5244971 |
| MP016092 | 20 | Transect 6000 | 21 P/5 | 730555 | 5246099 |
| MP016093 | 20 | Transect 6000 | 21 P/5 | 730648 | 5246089 |
| MP016094 | 20 | Transect 6000 | 21 P/5 | 730741 | 5246056 |
| MP016095 | 20 | Transect 6000 | 21 P/5 | 730849 | 5246031 |
| MP016096 | 20 | Transect 6000 | 21 P/5 | 730935 | 5245989 |
| MP016097 | 20 | Transect 6000 | 21 P/5 | 731042 | 5245948 |
| MP016098 | 20 | Transect 6000 | 21 P/5 | 731135 | 5245932 |
| MP016099 | 20 | Transect 6000 | 21 P/5 | 731195 | 5245845 |
| MP016100 | 20 | Transect 6000 | 21 P/5 | 729096 | 5246624 |
| MP016101 | 20 | Transect 6000 | 21 P/5 | 729190 | 5246638 |
| MP016102 | 20 | Transect 6000 | 21 P/5 | 729281 | 5246575 |
| MP016103 | 20 | Transect 6000 | 21 P/5 | 729359 | 5246528 |
| MP016104 | 20 | Transect 6000 | 21 P/5 | 729455 | 5246494 |
| MP016105 | 20 | Transect 6000 | 21 P/5 | 729551 | 5246469 |
| MP016106 | 20 | Transect 6000 | 21 P/5 | 729649 | 5246452 |
| MP016107 | 20 | Transect 6000 | 21 P/5 | 729730 | 5246425 |
| MP016108 | 20 | Transect 6000 | 21 P/5 | 729831 | 5246382 |
| MP016109 | 20 | Transect 6000 | 21 P/5 | 729918 | 5246351 |
| MP016110 | 20 | Transect 6000 | 21 P/5 | 730012 | 5246328 |
| MP016111 | 20 | Transect 6000 | 21 P/5 | 730102 | 5246287 |
| MP016112 | 20 | Transect 6000 | 21 P/5 | 730191 | 5246251 |
| MP016113 | 20 | Transect 6000 | 21 P/5 | 730300 | 5246222 |
| MP016114 | 20 | Transect 6000 | 21 P/5 | 730374 | 5246192 |

Appendix 10. Co-ordinates (UTM NAD 83) for QPX B-horizon soil and QPVX bark sample locations, Bathurst Mining Camp, New Brunswick

| SAMPLEID | Zone | Sampling Area | NTS | Easting | Northing |
|---|---|---|---|---|---|
| MP016115 | 20 | Transect 6000 | 21 P/5 | 730472 | 5246161 |
| MP016116 | 20 | Transect 6000 | 21 P/5 | 728989 | 5246631 |
| MP016117 | 20 | Transect 6000 | 21 P/5 | 728870 | 5246650 |
| MP016118 | 20 | Transect 6000 | 21 P/5 | 728827 | 5246817 |
| MPMP7000 | 20 | Railroad 1 | 21 P/5 | 739548 | 5242677 |
| MPMP7001 | 20 | Railroad 1 | 21 P/5 | 739529 | 5242674 |
| MPMP7002 | 20 | Railroad 1 | 21 P/5 | 739512 | 5242663 |
| MPMP7003 | 20 | Railroad 1 | 21 P/5 | 739484 | 5242651 |
| MPMP7004 | 20 | Railroad 1 | 21 P/5 | 739457 | 5242643 |
| MPMP7005 | 20 | Railroad 1 | 21 P/5 | 739355 | 5242736 |
| MPMP7006 | 20 | Railroad 1 | 21 P/5 | 739264 | 5242752 |
| MPMP7007 | 20 | Railroad 1 | 21 P/5 | 739576 | 5242693 |
| MPMP7008 | 20 | Railroad 1 | 21 P/5 | 739603 | 5242701 |
| MPMP7009 | 20 | Railroad 1 | 21 P/5 | 739629 | 5242678 |
| MPMP7010 | 20 | Railroad 1 | 21 P/5 | 739648 | 5242667 |
| MPMP7011 | 20 | Railroad 1 | 21 P/5 | 739715 | 5242632 |
| MPMP7012 | 20 | Railroad 1 | 21 P/5 | 739780 | 5242612 |
| MPMP7013 | 20 | Railroad 1 | 21 P/5 | 739550 | 5242589 |
| MPMP7014 | 20 | Railroad 1 | 21 P/5 | 739517 | 5242598 |
| MPMP7015 | 20 | Railroad 1 | 21 P/5 | 739498 | 5242602 |
| MPMP7016 | 20 | Railroad 1 | 21 P/5 | 739477 | 5242628 |
| MPMP7017 | 20 | Railroad 1 | 21 P/5 | 739447 | 5242625 |
| MPMP7018 | 20 | Railroad 1 | 21 P/5 | 739393 | 5242612 |
| MPMP7019 | 20 | Railroad 1 | 21 P/5 | 739351 | 5242612 |
| MPMP7020 | 20 | Railroad 1 | 21 P/5 | 739595 | 5242569 |
| MPMP7021 | 20 | Railroad 1 | 21 P/5 | 739609 | 5242555 |
| MPMP7022 | 20 | Railroad 1 | 21 P/5 | 739624 | 5242552 |
| MPMP7023 | 20 | Railroad 1 | 21 P/5 | 739645 | 5242546 |
| MPMP7024 | 20 | Railroad 1 | 21 P/5 | 739694 | 5242533 |
| MPMP7025 | 20 | Railroad 1 | 21 P/5 | 739740 | 5242527 |
| MPMP7026 | 20 | Railroad 1 | 21 P/5 | 739348 | 5242424 |
| MPMP7027 | 20 | Railroad 1 | 21 P/5 | 739266 | 5242478 |
| MPMP7028 | 20 | Railroad 1 | 21 P/5 | 739392 | 5242400 |
| MPMP7029 | 20 | Railroad 1 | 21 P/5 | 739414 | 5242394 |
| MPMP7030 | 20 | Railroad 1 | 21 P/5 | 739443 | 5242383 |
| MPMP7031 | 20 | Railroad 1 | 21 P/5 | 739469 | 5242379 |
| MPMP7032 | 20 | Railroad 1 | 21 P/5 | 739489 | 5242375 |
| MPMP7033 | 20 | Railroad 1 | 21 P/5 | 739517 | 5242365 |
| MPMP7034 | 20 | Railroad 1 | 21 P/5 | 739539 | 5242355 |
| MPMP7035 | 20 | Railroad 1 | 21 P/5 | 739572 | 5242353 |
| MPMP7036 | 20 | Railroad 1 | 21 P/5 | 739591 | 5242345 |
| MPMP7037 | 20 | Railroad 1 | 21 P/5 | 739633 | 5242327 |
| MPMP7038 | 20 | Railroad 1 | 21 P/5 | 739719 | 5242753 |
| MPMP7039 | 20 | Railroad 1 | 21 P/5 | 739669 | 5242772 |
| MPMP7040 | 20 | Railroad 1 | 21 P/5 | 739637 | 5242782 |
| MPMP7041 | 20 | Railroad 1 | 21 P/5 | 739621 | 5242800 |
| MPMP7042 | 20 | Railroad 1 | 21 P/5 | 739602 | 5242799 |
| MPMP7043 | 20 | Railroad 1 | 21 P/5 | 739580 | 5242809 |
| MPMP7044 | 20 | Railroad 1 | 21 P/5 | 739564 | 5242830 |
| MPMP7045 | 20 | Railroad 1 | 21 P/5 | 739533 | 5242837 |
| MPMP7046 | 20 | Railroad 1 | 21 P/5 | 739511 | 5242835 |
| MPMP7047 | 20 | Railroad 1 | 21 P/5 | 739489 | 5242841 |
| MPMP7048 | 20 | Railroad 1 | 21 P/5 | 739447 | 5242868 |
| MPMP7049 | 20 | Railroad 1 | 21 P/5 | 739351 | 5242875 |
| MPMP7050 | 20 | Railroad 1 | 21 P/5 | 739602 | 5242986 |
| MPMP7051 | 20 | Railroad 1 | 21 P/5 | 739564 | 5243040 |
| MPMP7052 | 20 | Railroad 1 | 21 P/5 | 739552 | 5243025 |
| MPMP7053 | 20 | Railroad 1 | 21 P/5 | 739528 | 5243069 |
| MPMP7054 | 20 | Railroad 1 | 21 P/5 | 739511 | 5243050 |
| MPMP7055 | 20 | Railroad 1 | 21 P/5 | 739467 | 5243051 |
| MPMP7056 | 20 | Railroad 1 | 21 P/5 | 739369 | 5243095 |
| MPMP7057 | 20 | Railroad 1 | 21 P/5 | 739621 | 5243010 |
| MPMP7058 | 20 | Railroad 1 | 21 P/5 | 739649 | 5243003 |
| MPMP7059 | 20 | Railroad 1 | 21 P/5 | 739681 | 5242999 |
| MPMP7060 | 20 | Railroad 1 | 21 P/5 | 739701 | 5242977 |
| MPMP7061 | 20 | Railroad 1 | 21 P/5 | 739743 | 5242965 |
| MPMP7062 | 20 | Railroad 1 | 21 P/5 | 739832 | 5242932 |
| MPMP7063 | 20 | Railroad 2 | 21 P/5 | 738897 | 5243013 |
| MPMP7064 | 20 | Railroad 2 | 21 P/5 | 738795 | 5243045 |
| MPMP7065 | 20 | Railroad 2 | 21 P/5 | 738748 | 5243067 |
| MPMP7066 | 20 | Railroad 2 | 21 P/5 | 738724 | 5243070 |
| MPMP7067 | 20 | Railroad 2 | 21 P/5 | 738703 | 5243069 |

## Appendix 10. Co-ordinates (UTM NAD 83) for QPX B-horizon soil and QPVX bark sample locations, Bathurst Mining Camp, New Brunswick

| SAMPLEID | Zone | Sampling Area | NTS | Easting | Northing |
|---|---|---|---|---|---|
| MPMP7068 | 20 | Railroad 2 | 21 P/5 | 738682 | 5243082 |
| MPMP7069 | 20 | Railroad 2 | 21 P/5 | 738654 | 5243088 |
| MPMP7070 | 20 | Railroad 2 | 21 P/5 | 738630 | 5243045 |
| MPMP7071 | 20 | Railroad 2 | 21 P/5 | 738604 | 5243047 |
| MPMP7072 | 20 | Railroad 2 | 21 P/5 | 738583 | 5243047 |
| MPMP7073 | 20 | Railroad 2 | 21 P/5 | 738541 | 5243072 |
| MPMP7074 | 20 | Railroad 2 | 21 P/5 | 738512 | 5243098 |
| MPMP7075 | 20 | Railroad 2 | 21 P/5 | 738415 | 5243130 |
| MPMP7076 | 20 | Railroad 2 | 21 P/5 | 738383 | 5243047 |
| MPMP7077 | 20 | Railroad 2 | 21 P/5 | 738479 | 5242995 |
| MPMP7078 | 20 | Railroad 2 | 21 P/5 | 738529 | 5242972 |
| MPMP7079 | 20 | Railroad 2 | 21 P/5 | 738562 | 5242961 |
| MPMP7080 | 20 | Railroad 2 | 21 P/5 | 738581 | 5242974 |
| MPMP7081 | 20 | Railroad 2 | 21 P/5 | 738613 | 5242974 |
| MPMP7082 | 20 | Railroad 2 | 21 P/5 | 738625 | 5242986 |
| MPMP7083 | 20 | Railroad 2 | 21 P/5 | 738656 | 5242995 |
| MPMP7084 | 20 | Railroad 2 | 21 P/5 | 738679 | 5242970 |
| MPMP7085 | 20 | Railroad 2 | 21 P/5 | 738699 | 5242968 |
| MPMP7086 | 20 | Railroad 2 | 21 P/5 | 738727 | 5242954 |
| MPMP7087 | 20 | Railroad 2 | 21 P/5 | 738768 | 5242941 |
| MPMP7088 | 20 | Railroad 2 | 21 P/5 | 738857 | 5242898 |
| MPMP7089 | 20 | Railroad 2 | 21 P/5 | 738898 | 5243070 |
| MPMP7090 | 20 | Railroad 2 | 21 P/5 | 738823 | 5243126 |
| MPMP7091 | 20 | Railroad 2 | 21 P/5 | 738764 | 5243118 |
| MPMP7092 | 20 | Railroad 2 | 21 P/5 | 738745 | 5243149 |
| MPMP7093 | 20 | Railroad 2 | 21 P/5 | 738722 | 5243142 |
| MPMP7094 | 20 | Railroad 2 | 21 P/5 | 738702 | 5243150 |
| MPMP7095 | 20 | Railroad 2 | 21 P/5 | 738688 | 5243177 |
| MPMP7096 | 20 | Railroad 2 | 21 P/5 | 738655 | 5243187 |
| MPMP7097 | 20 | Railroad 2 | 21 P/5 | 738629 | 5243202 |
| MPMP7098 | 20 | Railroad 2 | 21 P/5 | 738606 | 5243201 |
| MPMP7099 | 20 | Railroad 2 | 21 P/5 | 738579 | 5243214 |
| MPMP7100 | 20 | Railroad 2 | 21 P/5 | 738539 | 5243239 |
| MPMP7101 | 20 | Railroad 2 | 21 P/5 | 738481 | 5243284 |
| MPMP7102 | 19 | Mount Fronsac | 21 O/8 | 699361 | 5256551 |
| MPMP7103 | 19 | Mount Fronsac | 21 O/8 | 699451 | 5256564 |
| MPMP7104 | 19 | Mount Fronsac | 21 O/8 | 699551 | 5256550 |
| MPMP7105 | 19 | Mount Fronsac | 21 O/8 | 699606 | 5256550 |
| MPMP7106 | 19 | Mount Fronsac | 21 O/8 | 699651 | 5256549 |
| MPMP7107 | 19 | Mount Fronsac | 21 O/8 | 699707 | 5256550 |
| MPMP7108 | 19 | Mount Fronsac | 21 O/8 | 699756 | 5256550 |
| MPMP7109 | 19 | Mount Fronsac | 21 O/8 | 699804 | 5256551 |
| MPMP7110 | 19 | Mount Fronsac | 21 O/8 | 699855 | 5256553 |
| MPMP7111 | 19 | Mount Fronsac | 21 O/8 | 699905 | 5256555 |
| MPMP7112 | 19 | Mount Fronsac | 21 O/8 | 699953 | 5256555 |
| MPMP7113 | 19 | Mount Fronsac | 21 O/8 | 700053 | 5256554 |
| MPMP7114 | 19 | Mount Fronsac | 21 O/8 | 700155 | 5256554 |
| MPMP7115 | 19 | Mount Fronsac | 21 O/8 | 700255 | 5256557 |
| MPMP7116 | 19 | Mount Fronsac | 21 O/8 | 700354 | 5256558 |
| MPMP7117 | 19 | Mount Fronsac | 21 O/8 | 700344 | 5257362 |
| MPMP7118 | 19 | Mount Fronsac | 21 O/8 | 700240 | 5257375 |
| MPMP7119 | 19 | Mount Fronsac | 21 O/8 | 700142 | 5257370 |
| MPMP7120 | 19 | Mount Fronsac | 21 O/8 | 700044 | 5257362 |
| MPMP7121 | 19 | Mount Fronsac | 21 O/8 | 699944 | 5257364 |
| MPMP7122 | 19 | Mount Fronsac | 21 O/8 | 699889 | 5257363 |
| MPMP7123 | 19 | Mount Fronsac | 21 O/8 | 699852 | 5257360 |
| MPMP7124 | 19 | Mount Fronsac | 21 O/8 | 699793 | 5257357 |
| MPMP7125 | 19 | Mount Fronsac | 21 O/8 | 699748 | 5257360 |
| MPMP7126 | 19 | Mount Fronsac | 21 O/8 | 699699 | 5257361 |
| MPMP7127 | 19 | Mount Fronsac | 21 O/8 | 699650 | 5257360 |
| MPMP7128 | 19 | Mount Fronsac | 21 O/8 | 699549 | 5257358 |
| MPMP7129 | 19 | Mount Fronsac | 21 O/8 | 699449 | 5257352 |
| MPMP7130 | 19 | Mount Fronsac | 21 O/8 | 699349 | 5257349 |
| MPMP7131 | 19 | Mount Fronsac | 21 O/8 | 699830 | 5258341 |
| MPMP7132 | 19 | Mount Fronsac | 21 O/8 | 699705 | 5258337 |
| MPMP7133 | 19 | Mount Fronsac | 21 O/8 | 699589 | 5258317 |
| MPMP7134 | 19 | Mount Fronsac | 21 O/8 | 699504 | 5258284 |
| MPMP7135 | 19 | Mount Fronsac | 21 O/8 | 699405 | 5258255 |
| MPMP7136 | 19 | Mount Fronsac | 21 O/8 | 699312 | 5258221 |
| MPMP7137 | 19 | Mount Fronsac | 21 O/8 | 699199 | 5258250 |
| MPMP7138 | 19 | Mount Fronsac | 21 O/8 | 699117 | 5258252 |
| MPMP7139 | 19 | Mount Fronsac | 21 O/8 | 698936 | 5258202 |

Appendix 10. Co-ordinates (UTM NAD 83) for QPX B-horizon soil and QPVX bark sample locations, Bathurst Mining Camp, New Brunswick

| SAMPLEID | Zone | Sampling Area | NTS | Easting | Northing |
|---|---|---|---|---|---|
| MPMP7140 | 19 | Mount Fronsac | 21 O/8 | 698902 | 5258108 |
| MPMP7141 | 19 | Mount Fronsac | 21 O/8 | 698841 | 5258083 |
| MPMP7142 | 19 | Camel Back | 21 O/9 | 707093 | 5264547 |
| MPMP7143 | 19 | Camel Back | 21 O/9 | 707062 | 5264629 |
| MPMP7144 | 19 | Camel Back | 21 O/9 | 707030 | 5264706 |
| MPMP7145 | 19 | Camel Back | 21 O/9 | 706998 | 5264820 |
| MPMP7146 | 19 | Camel Back | 21 O/9 | 706968 | 5264906 |
| MPMP7147 | 19 | Camel Back | 21 O/9 | 706940 | 5264991 |
| MPMP7148 | 19 | Camel Back | 21 O/9 | 706901 | 5265102 |
| MPMP7149 | 19 | Camel Back | 21 O/9 | 706864 | 5265201 |
| MPMP7150 | 19 | Camel Back | 21 O/9 | 706836 | 5265292 |
| MPMP7151 | 19 | Camel Back | 21 O/9 | 706804 | 5265387 |
| MPMP7152 | 19 | Camel Back | 21 O/9 | 706768 | 5265471 |
| MPMP7153 | 19 | Camel Back | 21 O/9 | 707154 | 5265584 |
| MPMP7154 | 19 | Camel Back | 21 O/9 | 707178 | 5265523 |
| MPMP7155 | 19 | Camel Back | 21 O/9 | 707214 | 5265423 |
| MPMP7156 | 19 | Camel Back | 21 O/9 | 707236 | 5265359 |
| MPMP7157 | 19 | Camel Back | 21 O/9 | 707276 | 5265238 |
| MPMP7158 | 19 | Camel Back | 21 O/9 | 707309 | 5265142 |
| MPMP7159 | 19 | Camel Back | 21 O/9 | 707343 | 5265046 |
| MPMP7160 | 19 | Camel Back | 21 O/9 | 707375 | 5264950 |
| MPMP7161 | 19 | Camel Back | 21 O/9 | 707408 | 5264854 |
| MPMP7162 | 19 | Camel Back | 21 O/9 | 707441 | 5264766 |
| MPMP7163 | 19 | Camel Back | 21 O/9 | 707469 | 5264678 |
| MPMP7164 | 19 | Camel Back | 21 O/9 | 707675 | 5265183 |
| MPMP7165 | 19 | Camel Back | 21 O/9 | 707637 | 5265277 |
| MPMP7166 | 19 | Camel Back | 21 O/9 | 707607 | 5265372 |
| MPMP7167 | 19 | Camel Back | 21 O/9 | 707577 | 5265463 |
| MPMP7168 | 19 | Camel Back | 21 O/9 | 707543 | 5265571 |
| MPMP7169 | 19 | Camel Back | 21 O/9 | 707505 | 5265656 |
| MPMP7170 | 19 | Camel Back | 21 O/9 | 707491 | 5265705 |
| MPMP7171 | 19 | Camel Back | 21 O/9 | 707706 | 5265096 |
| MPMP7172 | 19 | Camel Back | 21 O/9 | 707738 | 5264996 |
| MPMP7173 | 19 | Camel Back | 21 O/9 | 707770 | 5264907 |
| MPMP7174 | 19 | Camel Back | 21 O/9 | 707804 | 5264810 |
| MPMP7175 | 20 | Taylor Brook | 21 P/5 | 752113 | 5252900 |
| MPMP7176 | 20 | Taylor Brook | 21 P/5 | 752199 | 5252934 |
| MPMP7177 | 20 | Taylor Brook | 21 P/5 | 752300 | 5252965 |
| MPMP7178 | 20 | Taylor Brook | 21 P/5 | 752387 | 5252988 |
| MPMP7179 | 20 | Taylor Brook | 21 P/5 | 752475 | 5253037 |
| MPMP7180 | 20 | Taylor Brook | 21 P/5 | 752559 | 5253121 |
| MPMP7181 | 20 | Taylor Brook | 21 P/5 | 752644 | 5253172 |
| MPMP7182 | 20 | Taylor Brook | 21 P/5 | 752728 | 5253236 |
| MPMP7183 | 20 | Taylor Brook | 21 P/5 | 752806 | 5253291 |
| MPMP7184 | 20 | Taylor Brook | 21 P/5 | 752877 | 5253348 |
| MPMP7185 | 20 | Taylor Brook | 21 P/5 | 752964 | 5253408 |
| MPMP7186 | 20 | Taylor Brook | 21 P/5 | 753047 | 5253473 |
| MPMP7187 | 20 | Taylor Brook | 21 P/5 | 753135 | 5253523 |
| MPMP7188 | 20 | Taylor Brook | 21 P/5 | 753213 | 5253582 |
| MPMP7189 | 20 | Taylor Brook | 21 P/5 | 753287 | 5253635 |
| MPMP7190 | 20 | Taylor Brook | 21 P/5 | 753361 | 5253706 |
| MPMP7191 | 20 | Taylor Brook | 21 P/5 | 753441 | 5253780 |
| MPMP7192 | 20 | Taylor Brook | 21 P/5 | 753529 | 5253865 |
| MPMP7193 | 20 | Taylor Brook | 21 P/5 | 753608 | 5253916 |
| MPMP7194 | 20 | Taylor Brook | 21 P/5 | 753689 | 5253976 |
| MPMP7195 | 20 | Taylor Brook | 21 P/5 | 753777 | 5254050 |
| MPMP7196 | 20 | Taylor Brook | 21 P/5 | 753850 | 5254111 |
| MPMP7197 | 20 | Taylor Brook | 21 P/5 | 753918 | 5254191 |
| MPMP7198 | 20 | Taylor Brook | 21 P/5 | 754007 | 5254248 |
| MPMP7199 | 20 | Taylor Brook | 21 P/5 | 754083 | 5254304 |
| MPMP7200 | 20 | Taylor Brook | 21 P/5 | 754157 | 5254363 |
| MPMP7201 | 20 | Taylor Brook | 21 P/5 | 754237 | 5254429 |
| MPMP7202 | 20 | Taylor Brook | 21 P/5 | 754306 | 5254469 |
| MPMP7203 | 20 | Taylor Brook | 21 P/5 | 754390 | 5254497 |
| MPMP7204 | 20 | Taylor Brook | 21 P/5 | 754517 | 5254628 |
| MPMP7205 | 20 | Taylor Brook | 21 P/5 | 754581 | 5254672 |
| MPMP7206 | 20 | Taylor Brook | 21 P/5 | 754664 | 5254725 |

**Readme2003-8.doc**

FILES CONTAINED ON THIS DISK CONSIST OF THE FOLLOWING FILES, WHICH REPRESENT A DIGITAL VERSION OF THE APPENDICES IN OPEN FILE REPORT 2003-8.

MS EXCEL FORMAT

**Appendix1-QPX5000.xls** - Appendix 1. QPX B-horizon soil geochemistry, Transect 5000, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick – (ICP-MS).

**Appendix2-QPX6000.xls** - Appendix 2. QPX B-horizon soil geochemistry, Transect 6000, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick – (ICP MS).

**Appendix3a-QPXRailroad.xls** - Appendix 3a. QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS).

**Appendix4a-QPXFronsac.xls** - Appendix 4a. QPX B-horizon soil geochemistry, Mount Fronsac massive sulphide deposit, Bathurst Mining Camp, 21 O/8, New Brunswick – (ICP-MS).

**Appendix5a-QPXCamelBack.xls** - Appendix 5a. QPX B-horizon soil geochemistry, Camel Back massive sulphide deposit, Bathurst Mining Camp, 21 O/9, New Brunswick – (ICP MS).

**Appendix6a-QPVXTaylorBrook.xls** - Appendix 6a. QPVX bark sample geochemistry, Taylor Brook Road, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick – (ICP-MS).

**Appendix7a-CONRail1&2.xls** - Appendix 7a. Conventional geochemical analysis of B-horizon soil samples, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick – (ICP-ES).

**Appendix7b-CONFronsac.xls** - Appendix 7b. Conventional geochemical analysis of B-horizon soil samples, Mount Fronsac massive sulphide deposit, Bathurst Mining Camp, 21 O/8, New Brunswick – (ICP-ES).

**Appendix7c-CONCamelBack.xls** - Appendix 7c. Conventional geochemical analysis of B-horizon soil samples, Camel Back massive sulphide deposit, Bathurst Mining Camp, 21 O/9, New Brunswick - (ICP-ES).

**Appendix8a-CONvsQPXRail.xls** - Appendix 8a. Conventional versus QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick – (ICP-MS) and (ICP-ES).

**Appendix8b8c-CONvsQPXFronsacCamelBack.xls** - Appendix 8b. Conventional versus QPX B-horizon soil geochemistry, Mount Fronsac massive sulphide deposit, Bathurst Mining Camp, 21 O/8, New Brunswick – (ICP-MS) and (ICP-ES).

**Appendix8b8c-CONvsQPXFronsacCamelBack.xls** - Appendix 8c. Conventional versus QPX B-horizon soil geochemistry, Camel Back massive sulphide deposit, Bathurst Mining Camp, 21 O/9, New Brunswick - (ICP-MS) and (ICP-ES).

**Appendix9-QPXQualityControl.xls** - Appendix 9. Quality control data, QPX and QPVX project, Bathurst Mining Camp, New Brunswick – (ICP-MS).

**Appendix10-QPXUTM.xls** - Appendix 10. Co-ordinates (UTM NAD 83) for QPX B-horizon soil and QPVX bark sample locations Bathurst Mining Camp, New Brunswick.

**Appendix3b4b5b6b7b8d8e8f-QPXCONGraphs.xls** - Appendix 3b. Profile plots, QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick – (ICP-MS).

**Appendix3b4b5b6b7b8d8e8f-QPXCONGraphs.xls** - Appendix 4b. Profile plots, QPX B-horizon soil geochemistry, Mount Fronsac massive sulphide deposit, Bathurst Mining Camp, 21 O/8, New Brunswick – (ICP-MS).

**Appendix3b4b5b6b7b8d8e8f-QPXCONGraphs.xls** - Appendix 5b. Profile plots, QPX B-horizon soil geochemistry, Camel Back massive sulphide deposit, Bathurst Mining Camp, 21 O/9, New Brunswick – (ICP-MS).

**Appendix3b4b5b6b7b8d8e8f-QPXCONGraphs.xls** - Appendix 6b. Profile plots, QPVX bark sample geochemistry Taylor Brook Road, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick - (ICP-MS).

**Appendix3b4b5b6b7b8d8e8f-QPXCONGraphs.xls** - Appendix 8d. Profile plots of conventional versus QPX B-horizon soil geochemistry, Railroad 1 and 2, southeastern Bathurst Mining Camp, 21 P/5, New Brunswick – (ICP-MS) and (ICP-ES).

**Appendix3b4b5b6b7b8d8e8f-QPXCONGraphs.xls** - Appendix 8e. Profile plots of conventional versus QPX B-horizon soil geochemistry, Mount Fronsac massive sulphide deposit, Bathurst Mining Camp, 21 O/8, New Brunswick – (ICP-MS) and (ICP-ES).

**Appendix3b4b5b6b7b8d8e8f-QPXCONGraphs.xls** - Appendix 8f. Profile plots of conventional versus QPX B-horizon soil geochemistry, Camel Back massive sulphide deposit, Bathurst Mining Camp, 21 O/9, New Brunswick – (ICP-MS) and (ICP-ES).

## Notes

# MAPS

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